

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 3 McBean Park Drive 6					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	2390	\$1.20	\$2,900
10	Subgrade Street Prep (Street)	SF	0	\$0.25	\$0
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	2390	\$0.30	\$700
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	598	\$15.00	\$9,000
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	45	\$15.00	\$700
29	Street Lights (every 150 LF)	EA	8	\$6,000.00	\$48,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	1195	\$3.00	\$3,600
32	Reconstruct Ditches	LF	1195	\$3.00	\$3,600
33	Erosion Control	LF	1195	\$25.00	\$29,900
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	9560	\$2.00	\$19,100
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	1	\$100,000.00	\$100,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$267,500</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

Contingency Based upon Hard Costs (15/): \$40,100

Soft Costs Contingency (17/): \$45,500

**TOTAL CIRCULATION \$353,100**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 3 McBean Park Drive 7					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	7340	\$1.20	\$8,800
10	Subgrade Street Prep (Street)	SF	0	\$0.25	\$0
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	7340	\$0.30	\$2,200
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	1835	\$15.00	\$27,500
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	12	\$6,000.00	\$72,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	3670	\$3.00	\$11,000
32	Reconstruct Ditches	LF	3670	\$3.00	\$11,000
33	Erosion Control	LF	3670	\$25.00	\$91,800
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	29360	\$2.00	\$58,700
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	1	\$100,000.00	\$100,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$433,000</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

Contingency Based upon Hard Costs (15/): \$65,000

Soft Costs Contingency (17/): \$73,600

**TOTAL CIRCULATION \$571,600**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 3 State Route 193 1					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	0.5	\$50,000.00	\$25,000
2	Excavation	CY	80	\$7.00	\$600
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	1083	\$2.50	\$2,700
7	7" AC (assumes a Traffic Index of 11)	SF	1083	\$4.00	\$4,300
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	1520	\$1.20	\$1,800
10	Subgrade Street Prep (Street)	SF	1083	\$0.25	\$300
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	380	\$15.00	\$5,700
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	75	\$15.00	\$1,100
29	Street Lights (every 150 LF)	EA	5	\$6,000.00	\$30,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	760	\$3.00	\$2,300
32	Reconstruct Ditches	LF	760	\$3.00	\$2,300
33	Erosion Control	LF	760	\$25.00	\$19,000
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	6080	\$2.00	\$12,200
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0.5	\$100,000.00	\$50,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$157,300</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15/):** \$23,600

**Soft Costs Contingency (17/):** \$26,700

**TOTAL CIRCULATION** **\$207,600**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 3 State Route 193 2					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	0.5	\$50,000.00	\$25,000
2	Excavation	CY	625	\$7.00	\$4,400
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	8444	\$2.50	\$21,100
7	7" AC (assumes a Traffic Index of 11)	SF	8444	\$4.00	\$33,800
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	2680	\$1.20	\$3,200
10	Subgrade Street Prep (Street)	SF	8444	\$0.25	\$2,100
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	2680	\$0.30	\$800
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	670	\$15.00	\$10,100
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	20	\$15.00	\$300
29	Street Lights (every 150 LF)	EA	9	\$6,000.00	\$54,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	1340	\$3.00	\$4,000
32	Reconstruct Ditches	LF	1340	\$3.00	\$4,000
33	Erosion Control	LF	1340	\$25.00	\$33,500
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	10720	\$2.00	\$21,400
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0.5	\$100,000.00	\$50,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$267,700</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

Contingency Based upon Hard Costs (15/): \$40,200

Soft Costs Contingency (17/): \$45,500

**TOTAL CIRCULATION \$353,400**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 3 State Route 193 6					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	1400	\$7.00	\$9,700
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	18731	\$2.50	\$46,800
7	7" AC (assumes a Traffic Index of 11)	SF	18731	\$4.00	\$74,900
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	1860	\$1.20	\$2,200
10	Subgrade Street Prep (Street)	SF	18731	\$0.25	\$4,700
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	1860	\$0.30	\$600
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	465	\$15.00	\$7,000
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	930	\$360.00	\$334,800
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	60	\$15.00	\$900
29	Street Lights (every 150 LF)	EA	6	\$6,000.00	\$36,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	930	\$3.00	\$2,800
32	Reconstruct Ditches	LF	930	\$3.00	\$2,800
33	Erosion Control	LF	930	\$25.00	\$23,300
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	7440	\$2.00	\$14,900
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	1	\$100,000.00	\$100,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$711,400</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15%):** \$106,700

**Soft Costs Contingency (17%):** \$120,900

**TOTAL CIRCULATION** **\$939,000**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 3 Oak Tree Lane 3					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	22320	\$1.80	\$40,200
4	16" AB (assumes a Traffic Index of 9)	SF	54000	\$2.25	\$121,500
5	5" AC (assumes a Traffic Index of 9)	SF	54000	\$2.70	\$145,800
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	54000	\$0.25	\$13,500
11	Subgrade Prep (Curb & Gutter)	SF	27000	\$0.30	\$8,100
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	1500	\$15.00	\$22,500
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	13320	\$6.00	\$79,900
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	1500	\$115.00	\$172,500
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	3000	\$12.00	\$36,000
23	Median Landscaping	SF	18000	\$4.50	\$81,000
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	3000	\$27.00	\$81,000
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	10	\$6,000.00	\$60,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	1500	\$25.00	\$37,500
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					\$949,500

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15/):** \$142,400

**Soft Costs Contingency (17/):** \$161,400

**TOTAL CIRCULATION** \$1,253,300

406

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 3 Oak Tree Lane 10					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	0.5	\$50,000.00	\$25,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	103020	\$2.25	\$231,800
5	5" AC (assumes a Traffic Index of 9)	SF	103020	\$2.70	\$278,200
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	103020	\$0.25	\$25,700
11	Subgrade Prep (Curb & Gutter)	SF	54540	\$0.30	\$16,300
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	3030	\$15.00	\$45,300
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	36360	\$6.00	\$218,100
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	3030	\$115.00	\$348,400
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	6060	\$12.00	\$72,700
23	Median Landscaping	SF	29160	\$4.50	\$131,300
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	6060	\$27.00	\$163,700
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	20	\$6,000.00	\$120,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	3030	\$25.00	\$75,600
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	1	\$75,000.00	\$75,000
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	1470	\$45.00	\$66,200
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$1,893,300</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15/):** \$284,000

**Soft Costs Contingency (17/):** \$321,900

**TOTAL CIRCULATION** \$2,499,200

407



Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 3 Oak Tree Lane 11					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	0.5	\$50,000.00	\$25,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	17370	\$1.80	\$31,300
4	16" AB (assumes a Traffic Index of 9)	SF	32810	\$2.25	\$73,800
5	5" AC (assumes a Traffic Index of 9)	SF	32810	\$2.70	\$88,600
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	32810	\$0.25	\$8,200
11	Subgrade Prep (Curb & Gutter)	SF	17370	\$0.30	\$5,200
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	965	\$15.00	\$14,500
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	11580	\$6.00	\$69,500
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	965	\$115.00	\$111,000
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	1930	\$12.00	\$23,200
23	Median Landscaping	SF	11580	\$4.50	\$52,100
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	1	\$75,000.00	\$75,000
26	Curb and Gutter	LF	1930	\$27.00	\$52,100
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	6	\$6,000.00	\$36,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	965	\$25.00	\$24,100
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	850	\$133.00	\$113,100
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$802,700</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15/):** \$120,400

**Soft Costs Contingency (17/):** \$136,500

**TOTAL CIRCULATION \$1,059,600**



Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 4 Summary					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	6	\$50,000.00	\$300,000
2	Excavation	CY	1100	\$7.00	\$7,700
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	83560	\$1.80	\$150,400
4	16" AB (assumes a Traffic Index of 9)	SF	213000	\$2.25	\$479,300
5	5" AC (assumes a Traffic Index of 9)	SF	213000	\$2.70	\$575,100
6	18" AB (assumes a Traffic Index of 11)	SF	5916	\$2.50	\$14,800
7	7" AC (assumes a Traffic Index of 11)	SF	5916	\$4.00	\$23,700
8	Decomposed Granite Trail (4' width, 4" thick)	SF	10760	\$1.80	\$19,400
9	4" AB Shoulder (2' width)	SF	1520	\$1.20	\$1,800
10	Subgrade Street Prep (Street)	SF	218916	\$0.25	\$54,700
11	Subgrade Prep (Curb & Gutter)	SF	83560	\$0.30	\$25,100
12	Subgrade Prep (AB Shoulder)	SF	1520	\$0.30	\$500
13	Subgrade Prep (DG Trail)	SF	10760	\$0.30	\$3,200
14	Signing and Striping (36' ROW)*	LF	5780	\$15.00	\$86,700
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	53440	\$6.00	\$320,600
19	Roundabout	EA	1	\$100,000.00	\$100,000
20	Joint Trench	LF	6365	\$115.00	\$732,000
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	7615	\$12.00	\$91,400
23	Median Landscaping	SF	58535	\$4.50	\$263,400
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	10040	\$27.00	\$271,100
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	48	\$6,000.00	\$288,000
30	Sawcut and Pavement Removal Median	LF	3355	\$20.00	\$67,100
31	Sawcut and Pavement Removal	LF	2595	\$3.00	\$7,800
32	Reconstruct Ditches	LF	760	\$3.00	\$2,300
33	Erosion Control	LF	8960	\$25.00	\$224,000
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	109880	\$2.00	\$219,800
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	3	\$100,000.00	\$300,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$4,629,900</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15%):** \$694,500

**Soft Costs Contingency (17%):** \$787,100

**TOTAL CIRCULATION** \$6,111,500

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 4 McBean Park Drive 8					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	0	\$0.25	\$0
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	0	\$15.00	\$0
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	1835	\$12.00	\$22,000
23	Median Landscaping	SF	23855	\$4.50	\$107,300
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	0	\$6,000.00	\$0
30	Sawcut and Pavement Removal Median	LF	1835	\$20.00	\$36,700
31	Sawcut and Pavement Removal	LF	1835	\$3.00	\$5,500
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	1835	\$25.00	\$45,900
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	73400	\$2.00	\$146,800
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	1	\$100,000.00	\$100,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$514,200</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

Contingency Based upon Hard Costs (15/): \$77,100

Soft Costs Contingency (17/): \$87,400

**TOTAL CIRCULATION \$678,700**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 4 State Route 193 7					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	1100	\$7.00	\$7,700
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	5916	\$2.50	\$14,800
7	7" AC (assumes a Traffic Index of 11)	SF	5916	\$4.00	\$23,700
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	1520	\$1.20	\$1,800
10	Subgrade Street Prep (Street)	SF	5916	\$0.25	\$1,500
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	1520	\$0.30	\$500
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	760	\$15.00	\$11,400
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	760	\$12.00	\$9,100
23	Median Landscaping	SF	4560	\$4.50	\$20,500
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	5	\$6,000.00	\$30,000
30	Sawcut and Pavement Removal Median	LF	1520	\$20.00	\$30,400
31	Sawcut and Pavement Removal	LF	760	\$3.00	\$2,300
32	Reconstruct Ditches	LF	760	\$3.00	\$2,300
33	Erosion Control	LF	760	\$25.00	\$19,000
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	36480	\$2.00	\$73,000
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	1	\$100,000.00	\$100,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$398,000</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

Contingency Based upon Hard Costs (15/): \$59,700

Soft Costs Contingency (17/): \$67,700

**TOTAL CIRCULATION \$525,400**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 4 Oak Tree Lane 2					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	29160	\$1.80	\$52,500
4	16" AB (assumes a Traffic Index of 9)	SF	58320	\$2.25	\$131,200
5	5" AC (assumes a Traffic Index of 9)	SF	58320	\$2.70	\$157,500
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	58320	\$0.25	\$14,600
11	Subgrade Prep (Curb & Gutter)	SF	29160	\$0.30	\$8,700
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	1620	\$15.00	\$24,300
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	19440	\$6.00	\$116,600
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	1620	\$115.00	\$186,300
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	3240	\$12.00	\$38,900
23	Median Landscaping	SF	19440	\$4.50	\$87,500
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	3240	\$27.00	\$87,500
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	11	\$6,000.00	\$66,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	1620	\$25.00	\$40,500
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$1,062,100</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15/):** \$159,300

**Soft Costs Contingency (17/):** \$180,600

**TOTAL CIRCULATION** **\$1,402,000**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 4 North South Collector 1					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	14240	\$1.80	\$25,600
4	16" AB (assumes a Traffic Index of 9)	SF	32040	\$2.25	\$72,100
5	5" AC (assumes a Traffic Index of 9)	SF	32040	\$2.70	\$86,500
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	32040	\$0.25	\$8,000
11	Subgrade Prep (Curb & Gutter)	SF	14240	\$0.30	\$4,300
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	890	\$15.00	\$13,400
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	8900	\$6.00	\$53,400
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	890	\$115.00	\$102,400
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	1780	\$12.00	\$21,400
23	Median Landscaping	SF	10680	\$4.50	\$48,100
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	1780	\$27.00	\$48,100
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	6	\$6,000.00	\$36,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	890	\$25.00	\$22,300
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$591,600</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15%):** \$88,700

**Soft Costs Contingency (17%):** \$100,600

**TOTAL CIRCULATION** **\$780,900**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 4 Collector Loop 1					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	40160	\$1.80	\$72,300
4	16" AB (assumes a Traffic Index of 9)	SF	90360	\$2.25	\$203,400
5	5" AC (assumes a Traffic Index of 9)	SF	90360	\$2.70	\$243,900
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	90360	\$0.25	\$22,500
11	Subgrade Prep (Curb & Gutter)	SF	40160	\$0.30	\$12,100
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	2510	\$15.00	\$37,600
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	25100	\$6.00	\$150,600
19	Roundabout	EA	1	\$100,000.00	\$100,000
20	Joint Trench	LF	2510	\$115.00	\$288,600
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	5020	\$27.00	\$135,500
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	17	\$6,000.00	\$102,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	2510	\$25.00	\$62,700
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$1,481,200</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15%):** \$222,300

**Soft Costs Contingency (17%):** \$251,700

**TOTAL CIRCULATION** \$1,955,200

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 4 Liberty Lane 1					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	32280	\$2.25	\$72,600
5	5" AC (assumes a Traffic Index of 9)	SF	32280	\$2.70	\$87,200
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	10760	\$1.80	\$19,400
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	32280	\$0.25	\$8,100
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	10760	\$0.30	\$3,200
14	Signing and Striping (36' ROW)*	LF	0	\$15.00	\$0
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	1345	\$115.00	\$154,700
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	9	\$6,000.00	\$54,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	1345	\$25.00	\$33,600
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	1	\$100,000.00	\$100,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$582,800</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15/):** \$87,400

**Soft Costs Contingency (17/):** \$99,100

**TOTAL CIRCULATION** **\$769,300**



Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 5 Summary					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	4	\$50,000.00	\$200,000
2	Excavation	CY	2160	\$7.00	\$15,100
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	84980	\$1.80	\$153,000
4	16" AB (assumes a Traffic Index of 9)	SF	178920	\$2.25	\$402,600
5	5" AC (assumes a Traffic Index of 9)	SF	178920	\$2.70	\$483,100
6	18" AB (assumes a Traffic Index of 11)	SF	29163	\$2.50	\$72,900
7	7" AC (assumes a Traffic Index of 11)	SF	29163	\$4.00	\$116,700
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	12520	\$1.20	\$15,000
10	Subgrade Street Prep (Street)	SF	208083	\$0.25	\$52,000
11	Subgrade Prep (Curb & Gutter)	SF	84980	\$0.30	\$25,500
12	Subgrade Prep (AB Shoulder)	SF	11440	\$0.30	\$3,400
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	8520	\$15.00	\$127,800
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	55160	\$6.00	\$331,000
19	Roundabout	EA	1	\$100,000.00	\$100,000
20	Joint Trench	LF	2940	\$115.00	\$338,100
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	8080	\$12.00	\$97,000
23	Median Landscaping	SF	60570	\$4.50	\$272,600
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	9940	\$27.00	\$268,400
27	AC Driveway (Per Approx. 12' wide)	EA	6	\$960.00	\$5,800
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	74	\$6,000.00	\$444,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	6260	\$3.00	\$18,800
32	Reconstruct Ditches	LF	4730	\$3.00	\$14,200
33	Erosion Control	LF	11230	\$25.00	\$280,800
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	300480	\$2.00	\$601,000
39	Retrofit Utilities	EA	4	\$3,000.00	\$12,000
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	5350	\$45.00	\$240,800
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	1	\$100,000.00	\$100,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$4,791,600</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

Contingency Based upon Hard Costs (15/): \$718,700

Soft Costs Contingency (17/): \$814,600

**TOTAL CIRCULATION \$6,324,900**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 5 State Route 193 8					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	0.25	\$50,000.00	\$12,500
2	Excavation	CY	1073	\$7.00	\$7,500
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	14491	\$2.50	\$36,200
7	7" AC (assumes a Traffic Index of 11)	SF	14491	\$4.00	\$58,100
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	3880	\$1.20	\$4,700
10	Subgrade Street Prep (Street)	SF	14491	\$0.25	\$3,600
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	3880	\$0.30	\$1,100
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	970	\$15.00	\$14,600
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	3	\$960.00	\$2,900
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	13	\$6,000.00	\$78,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	1940	\$3.00	\$5,800
32	Reconstruct Ditches	LF	1940	\$3.00	\$5,800
33	Erosion Control	LF	1940	\$25.00	\$48,500
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	93120	\$2.00	\$186,200
39	Retrofit Utilities	EA	2	\$3,000.00	\$6,000
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0.25	\$100,000.00	\$25,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$496,500</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15%):** \$74,500

**Soft Costs Contingency (17%):** \$84,400

**TOTAL CIRCULATION** **\$655,400**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 5 State Route 193 9					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	0.25	\$50,000.00	\$12,500
2	Excavation	CY	343	\$7.00	\$2,400
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	4634	\$2.50	\$11,600
7	7" AC (assumes a Traffic Index of 11)	SF	4634	\$4.00	\$18,500
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	1280	\$1.20	\$1,500
10	Subgrade Street Prep (Street)	SF	4634	\$0.25	\$1,200
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	1280	\$0.30	\$400
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	320	\$15.00	\$4,800
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	4	\$6,000.00	\$24,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	640	\$3.00	\$1,900
32	Reconstruct Ditches	LF	640	\$3.00	\$1,900
33	Erosion Control	LF	640	\$25.00	\$16,000
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	30720	\$2.00	\$61,400
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0.25	\$100,000.00	\$25,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$183,100</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

Contingency Based upon Hard Costs (15/): \$27,500

Soft Costs Contingency (17/): \$31,100

**TOTAL CIRCULATION \$241,700**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 5 State Route 193 10					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	0.25	\$50,000.00	\$12,500
2	Excavation	CY	353	\$7.00	\$2,500
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	4760	\$2.50	\$11,900
7	7" AC (assumes a Traffic Index of 11)	SF	4760	\$4.00	\$19,000
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	3380	\$1.20	\$4,100
10	Subgrade Street Prep (Street)	SF	4760	\$0.25	\$1,200
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	3380	\$0.30	\$1,000
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	1690	\$15.00	\$25,400
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	3	\$960.00	\$2,900
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	11	\$6,000.00	\$66,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	1690	\$3.00	\$5,100
32	Reconstruct Ditches	LF	2150	\$3.00	\$6,500
33	Erosion Control	LF	1690	\$25.00	\$42,300
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	81120	\$2.00	\$162,200
39	Retrofit Utilities	EA	2	\$3,000.00	\$6,000
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0.25	\$100,000.00	\$25,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$393,600</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

Contingency Based upon Hard Costs (15/): \$59,000

Soft Costs Contingency (17/): \$66,900

**TOTAL CIRCULATION \$519,500**

Engineer's Opinion of Costs Village 1 - Backbone Roadway System Phase 5 State Route 193 11					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	0.25	\$50,000.00	\$12,500
2	Excavation	CY	391	\$7.00	\$2,700
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	0	\$1.80	\$0
4	16" AB (assumes a Traffic Index of 9)	SF	0	\$2.25	\$0
5	5" AC (assumes a Traffic Index of 9)	SF	0	\$2.70	\$0
6	18" AB (assumes a Traffic Index of 11)	SF	5278	\$2.50	\$13,200
7	7" AC (assumes a Traffic Index of 11)	SF	5278	\$4.00	\$21,100
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	3980	\$1.20	\$4,700
10	Subgrade Street Prep (Street)	SF	5278	\$0.25	\$1,300
11	Subgrade Prep (Curb & Gutter)	SF	0	\$0.30	\$0
12	Subgrade Prep (AB Shoulder)	SF	2900	\$0.30	\$900
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	570	\$15.00	\$8,600
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	0	\$115.00	\$0
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	0	\$27.00	\$0
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	13	\$6,000.00	\$78,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	1990	\$3.00	\$6,000
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	1990	\$25.00	\$49,800
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	95520	\$2.00	\$191,200
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0.25	\$100,000.00	\$25,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$415,000</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15/):** \$62,300

**Soft Costs Contingency (17/):** \$70,600

**TOTAL CIRCULATION** **\$547,900**

420

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 5 Oak Tree Lane 1					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	49140	\$1.80	\$88,500
4	16" AB (assumes a Traffic Index of 9)	SF	98280	\$2.25	\$221,200
5	5" AC (assumes a Traffic Index of 9)	SF	98280	\$2.70	\$265,400
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	98280	\$0.25	\$24,500
11	Subgrade Prep (Curb & Gutter)	SF	49140	\$0.30	\$14,700
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	2730	\$15.00	\$40,700
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	32760	\$6.00	\$196,600
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	700	\$115.00	\$80,500
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	5460	\$12.00	\$65,600
23	Median Landscaping	SF	32760	\$4.50	\$147,500
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	5460	\$27.00	\$147,500
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	18	\$6,000.00	\$108,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	2730	\$25.00	\$68,100
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	5350	\$45.00	\$240,800
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$1,759,600</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15 /):** \$263,800

**Soft Costs Contingency (17 /):** \$299,200

**TOTAL CIRCULATION** \$2,322,600

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 5 North South Collector 2					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	20960	\$1.80	\$37,700
4	16" AB (assumes a Traffic Index of 9)	SF	47160	\$2.25	\$106,100
5	5" AC (assumes a Traffic Index of 9)	SF	47160	\$2.70	\$127,300
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	47160	\$0.25	\$11,800
11	Subgrade Prep (Curb & Gutter)	SF	20960	\$0.30	\$6,300
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	1310	\$15.00	\$19,700
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	13100	\$6.00	\$78,600
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	1310	\$115.00	\$150,600
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	2620	\$12.00	\$31,400
23	Median Landscaping	SF	15720	\$4.50	\$70,700
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	2620	\$27.00	\$70,700
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	9	\$6,000.00	\$54,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	1310	\$25.00	\$32,800
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$847,700</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15/):** \$127,200

**Soft Costs Contingency (17/):** \$144,100

**TOTAL CIRCULATION** \$1,119,000



Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 5 Collector Loop 2					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	14880	\$1.80	\$26,800
4	16" AB (assumes a Traffic Index of 9)	SF	33480	\$2.25	\$75,300
5	5" AC (assumes a Traffic Index of 9)	SF	33480	\$2.70	\$90,400
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	33480	\$0.25	\$8,400
11	Subgrade Prep (Curb & Gutter)	SF	14880	\$0.30	\$4,500
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	930	\$15.00	\$14,000
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	9300	\$6.00	\$55,800
19	Roundabout	EA	1	\$100,000.00	\$100,000
20	Joint Trench	LF	930	\$115.00	\$107,000
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	12090	\$4.50	\$54,400
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	1860	\$27.00	\$50,200
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	6	\$6,000.00	\$36,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	930	\$25.00	\$23,300
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$696,100</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15/):** \$104,400

**Soft Costs Contingency (17/):** \$118,300

**TOTAL CIRCULATION** **\$918,800**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 6 Summary					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	60320	\$1.80	\$108,600
4	16" AB (assumes a Traffic Index of 9)	SF	135720	\$2.25	\$305,400
5	5" AC (assumes a Traffic Index of 9)	SF	135720	\$2.70	\$366,400
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	135720	\$0.25	\$33,900
11	Subgrade Prep (Curb & Gutter)	SF	60320	\$0.30	\$18,100
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	3770	\$15.00	\$56,600
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	37700	\$6.00	\$226,200
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	3770	\$115.00	\$433,600
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	7540	\$27.00	\$203,600
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	25	\$6,000.00	\$150,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	3770	\$25.00	\$94,300
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$2,046,700</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15/):** \$307,000

**Soft Costs Contingency (17/):** \$347,900

**TOTAL CIRCULATION** **\$2,701,600**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 6 Collector Loop 3					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	60320	\$1.80	\$108,600
4	16" AB (assumes a Traffic Index of 9)	SF	135720	\$2.25	\$305,400
5	5" AC (assumes a Traffic Index of 9)	SF	135720	\$2.70	\$366,400
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	135720	\$0.25	\$33,900
11	Subgrade Prep (Curb & Gutter)	SF	60320	\$0.30	\$18,100
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	3770	\$15.00	\$56,600
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	37700	\$6.00	\$226,200
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	3770	\$115.00	\$433,600
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	7540	\$27.00	\$203,600
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	25	\$6,000.00	\$150,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	3770	\$25.00	\$94,300
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$2,046,700</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15/):** \$307,000

**Soft Costs Contingency (17/):** \$347,900

**TOTAL CIRCULATION** \$2,701,600

**Engineer's Opinion of Costs**
**Village 1 - Backbone Roadway System**
**Phase 7 Summary**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	2	\$50,000.00	\$100,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	15210	\$1.80	\$27,400
4	16" AB (assumes a Traffic Index of 9)	SF	42760	\$2.25	\$96,200
5	5" AC (assumes a Traffic Index of 9)	SF	42760	\$2.70	\$115,500
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	42760	\$0.25	\$10,700
11	Subgrade Prep (Curb & Gutter)	SF	15210	\$0.30	\$4,600
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	3110	\$15.00	\$46,700
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	5880	\$6.00	\$35,300
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	3110	\$115.00	\$357,700
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	5880	\$4.50	\$26,500
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	3110	\$27.00	\$84,000
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	22	\$6,000.00	\$132,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	2130	\$3.00	\$6,400
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	3110	\$25.00	\$77,800
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	550	\$133.00	\$73,200
44	Split Rail Fencing	LF	980	\$45.00	\$44,100
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	1	\$100,000.00	\$100,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	1	\$5,500,000.00	\$5,500,000
<b>Construction Total:</b>					<b>\$6,838,100</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15%):** \$1,025,700

**Soft Costs Contingency (17%):** \$1,162,500

**TOTAL CIRCULATION** \$9,026,300

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 7 Oak Tree Lane 12					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	1	\$50,000.00	\$50,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	8820	\$1.80	\$15,900
4	16" AB (assumes a Traffic Index of 9)	SF	21560	\$2.25	\$48,500
5	5" AC (assumes a Traffic Index of 9)	SF	21560	\$2.70	\$58,300
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	21560	\$0.25	\$5,400
11	Subgrade Prep (Curb & Gutter)	SF	8820	\$0.30	\$2,700
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	980	\$15.00	\$14,700
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	5880	\$6.00	\$35,300
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	980	\$115.00	\$112,700
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	5880	\$4.50	\$26,500
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	980	\$27.00	\$26,500
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	7	\$6,000.00	\$42,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	0	\$3.00	\$0
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	980	\$25.00	\$24,500
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	550	\$133.00	\$73,200
44	Split Rail Fencing	LF	980	\$45.00	\$44,100
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	0	\$100,000.00	\$0
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	1	\$5,500,000.00	\$5,500,000
<b>Construction Total:</b>					<b>\$6,080,300</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

Contingency Based upon Hard Costs (15/): \$912,000

Soft Costs Contingency (17/): \$1,033,700

**TOTAL CIRCULATION \$8,026,000**

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 7 Virginiatown Road 1					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	0.5	\$50,000.00	\$25,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	6090	\$1.80	\$11,000
4	16" AB (assumes a Traffic Index of 9)	SF	20300	\$2.25	\$45,700
5	5" AC (assumes a Traffic Index of 9)	SF	20300	\$2.70	\$54,800
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	20300	\$0.25	\$5,100
11	Subgrade Prep (Curb & Gutter)	SF	6090	\$0.30	\$1,800
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	2030	\$15.00	\$30,500
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	2030	\$115.00	\$233,500
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	2030	\$27.00	\$54,800
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	14	\$6,000.00	\$84,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	2030	\$3.00	\$6,100
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	2030	\$25.00	\$50,800
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	1	\$100,000.00	\$50,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$653,100</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

**Contingency Based upon Hard Costs (15/):** \$98,000

**Soft Costs Contingency (17/):** \$111,000

**TOTAL CIRCULATION** **\$862,100**

428

Engineer's Opinion of Costs					
Village 1 - Backbone Roadway System					
Phase 7 Virginiatown Road 3					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Backbone Roadway System</b>					
1	Mobilization	JOB	0.5	\$50,000.00	\$25,000
2	Excavation	CY	0	\$7.00	\$0
3	4" AB (Under Curb & Gutter and Sidewalk)	SF	300	\$1.80	\$500
4	16" AB (assumes a Traffic Index of 9)	SF	900	\$2.25	\$2,000
5	5" AC (assumes a Traffic Index of 9)	SF	900	\$2.70	\$2,400
6	18" AB (assumes a Traffic Index of 11)	SF	0	\$2.50	\$0
7	7" AC (assumes a Traffic Index of 11)	SF	0	\$4.00	\$0
8	Decomposed Granite Trail (4' width, 4" thick)	SF	0	\$1.80	\$0
9	4" AB Shoulder (2' width)	SF	0	\$1.20	\$0
10	Subgrade Street Prep (Street)	SF	900	\$0.25	\$200
11	Subgrade Prep (Curb & Gutter)	SF	300	\$0.30	\$100
12	Subgrade Prep (AB Shoulder)	SF	0	\$0.30	\$0
13	Subgrade Prep (DG Trail)	SF	0	\$0.30	\$0
14	Signing and Striping (36' ROW)*	LF	100	\$15.00	\$1,500
15	Traffic Signals	EA	0	\$320,000.00	\$0
16	Future Traffic Signal	EA	0	\$275,000.00	\$0
17	Signalized Intersection	EA	0	\$900,000.00	\$0
18	Sidewalk, Concrete	SF	0	\$6.00	\$0
19	Roundabout	EA	0	\$100,000.00	\$0
20	Joint Trench	LF	100	\$115.00	\$11,500
21	Underground Existing Utilities in Joint Trench	LF	0	\$360.00	\$0
22	Type 5 Curb Median	LF	0	\$12.00	\$0
23	Median Landscaping	SF	0	\$4.50	\$0
24	Frontage Landscaping	SF	0	\$4.50	\$0
25	Signal Conduit and Wiring	EA	0	\$75,000.00	\$0
26	Curb and Gutter	LF	100	\$27.00	\$2,700
27	AC Driveway (Per Approx. 12' wide)	EA	0	\$960.00	\$0
28	Irrigation Sleeves	LF	0	\$15.00	\$0
29	Street Lights (every 150 LF)	EA	1	\$6,000.00	\$6,000
30	Sawcut and Pavement Removal Median	LF	0	\$20.00	\$0
31	Sawcut and Pavement Removal	LF	100	\$3.00	\$300
32	Reconstruct Ditches	LF	0	\$3.00	\$0
33	Erosion Control	LF	100	\$25.00	\$2,500
34	ROW Acquisition (Ferrari Ranch Road) **	LS	0	\$100,000.00	\$0
35	ROW Acquisition (Oak Tree Lane - North) **	LS	0	\$500,000.00	\$0
36	ROW Acquisition (Oak Tree Lane - South) ***	LS	0	\$50,000.00	\$0
37	Grind and Remove Pavement	SF	0	\$3.00	\$0
38	Grind and Overlay	SF	0	\$2.00	\$0
39	Retrofit Utilities	EA	0	\$3,000.00	\$0
40	Dewatering - Ferrari Ranch Road	EA	0	\$25,000.00	\$0
41	Dewatering - Oak Tree near So. Ingram Slough	EA	0	\$50,000.00	\$0
42	Dewatering - Oak Tree near new lake	EA	0	\$75,000.00	\$0
43	Golf Course Fence and Netting	LF	0	\$133.00	\$0
44	Split Rail Fencing	LF	0	\$45.00	\$0
45	FRR Supplemental Topo + Aerial Topo	JOB	0	\$12,500.00	\$0
46	Remediation Trench and Monitoring	JOB	0	\$1,000,000.00	\$0
47	Traffic Control	JOB	1	\$100,000.00	\$50,000
48	Traffic Control Oak Tree Lane	JOB	0	\$250,000.00	\$0
49	Bridge (at Auburn Ravine on Oak Tree Lane)	EA	0	\$5,500,000.00	\$0
<b>Construction Total:</b>					<b>\$104,700</b>

\* Cost per linear foot of roadway.

\*\* ROW Acquisition includes mapping, purchasing the land,

\*\*\* ROW Acquisition includes mapping.

Contingency Based upon Hard Costs (15/): \$15,700

Soft Costs Contingency (17/): \$17,800

**TOTAL CIRCULATION \$138,200**



**APPENDIX 7**

**Lincoln Village 1 Specific Plan**

**Infrastructure Finance Plan**

**Circulation Phasing**

# Circulation Phasing per City and Village 1

## Appendix 7

August 9, 2016

	Facility	Begin Improvement Plan Design by Building Permit [3] [4]	Bid Awarded by Building Permit [3] [4]	In Use by Building Permit [3] [4]
<b>Infrastructure Elements + PFE Eligible Infrastructure Elements [1]</b>				
1	McBean Park Drive and State Route 193 - North Side From Ferrari Ranch Road to 900 LF past Oak Tree Lane - 2 Westbound Lanes and 1 Eastbound Lane, including traffic signals	1000	1300	1400
2	Oak Tree Lane - McBean Park Drive/State Route 193 to Sierra College Boulevard or State Route 193, 2 lanes with landscaped median and traffic signal at McBean Park Drive and Sierra College Boulevard	500 EDU's [2]	700 EDU's [2]	1000 EDU's [2]
3	State Route 193, North Side - from 900 LF past Oak Tree Lane to the Village 1 Boundary, 2 Westbound Lanes and 1 Eastbound Lane, East of the North South Collector and 1 lane each direction after that, including traffic signals	1000	1300	1400
4	McBean Park Drive and State Route 193 - South Side from Ferrari Ranch Road to 900 LF past Oak Tree Lane, 1 eastbound lane	1900	2100	2300
5	State Route 193 - from 900 LF past Oak Tree Lane to the Village 1 Boundary, south side improvements 1 eastbound lane	2500	2700	3000
6	Oak Tree Lane - Ferrari Ranch Road to Virginia Town Road, 2 lanes with landscaped median, 2 lane bridge, traffic signal at Virginatown Road and traffic signal at Ferrari Ranch Road and Oak Tree Lane	3000	3200	3500
7	Ferrari Ranch Road - McBean Park Drive to La Bella Rosa Entrance	As required for development	As required for development	As required for development
8	Oak Tree Lane - McBean Park Drive/State Route 193 to La Bella Rosa Entrance, 2 lanes with landscaped median and traffic signal at McBean Park Drive and Ferrari Ranch Road	As required for development	As required for development	As required for development
9	Virginiatown Road - widen south side to ultimate width	As required for development	As required for development	As required for development
<b>Infrastructure Elements with No PFE Eligible Infrastructure Elements</b>				
10	Ferrari Ranch Road - La Bella Rosa Entrance to Oak Tree Lane, 2 Lanes with Landscaped Median.	By the 91st building unit in La Bella Rosa or 3 years after 1st La Bella Rosa building unit	By the 91st building unit in La Bella Rosa or 3 years after 1st La Bella Rosa building unit	By the 91st building unit in La Bella Rosa or 3 years after 1st La Bella Rosa building unit
11	Oak Tree Lane - La Bella Rosa Entrance to Ferrari Ranch Road, 2 lanes with landscaped median	2700	2900	3200
<b>Only PFE Eligible Infrastructure Elements [1]</b>				
12	Ferrari Ranch Road - McBean Park Drive South to Existing Bridge - 2 westerly lanes including median landscaping	500	900	1200
13	Ferrari Ranch Road - McBean Park Drive South to Existing Bridge - Frontage landscaping on the west side of the road	1500	1700	2000
14	Sierra College Boulevard and Twelve Bridges Drive Intersection - traffic signal and widening as necessary for the signal operation	Dictated by Warrants	Dictated by Warrants	Dictated by Warrants

[1] PFE Eligible Infrastructure items will be paid with available Village 1 Impact Fees collected.

[2] Assumes 1000 edu south of McBean Park Drive (limited to Village 1 projects, Excludes Crocker Knoll and VMU parcel on the corner of Oak Tree Lane and McBean Park Drive).

[3] Staff has flexibility to amend thresholds by up to 300 building permits to meet change in improvement timing based upon construction conditions or actual construction costs incurred.

[4] If available PFE funding is decreased due to allocation of money to critical facilities, then Staff shall have ability to adjust thresholds for facilities to be constructed.

**APPENDIX 8**

**Lincoln Village 1 Specific Plan**

**Infrastructure Finance Plan**

**Trails**

Engineer's Opinion of Costs Village 1 Trails Summary by Phase	
Description	Trails
<b>Infrastructure Costs</b>	
Phase 1	\$282,200
Phase 2	\$471,400
Phase 3	\$377,400
Phase 4	\$74,200
Phase 5	\$800,500
Phase 6	\$206,200
Phase 7	\$177,600
Phase 8	\$243,200
<b>Subtotal</b>	<b>\$2,632,700</b>

Engineer's Opinion of Costs					
Village 1 - Trails					
Summary					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	90880	\$3.25	\$295,300
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	157650	\$3.75	\$591,300
3	Subgrade Prep (AC Trail)	SF	248530	\$0.30	\$74,500
4	Signing and Striping (10' ROW)	LF	15765	\$3.00	\$47,300
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$1,008,400</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	226600	\$3.75	\$849,800
3	Subgrade Prep (AC Trail)	SF	226600	\$0.30	\$68,100
4	Signing and Striping (10' ROW)	LF	22660	\$3.00	\$68,100
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$986,000</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$1,994,400</b>

Contingency Based upon Hard Costs (15/): \$299,200

Soft Costs Contingency (17/): \$339,100

**TOTAL TRAILS \$2,632,700**

Engineer's Opinion of Costs					
Village 1 - Trails					
Phase 1 Summary					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	14160	\$3.25	\$46,000
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	37600	\$3.75	\$141,000
3	Subgrade Prep (AC Trail)	SF	51760	\$0.30	\$15,500
4	Signing and Striping (10' ROW)	LF	3760	\$3.00	\$11,300
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$213,800</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$213,800</b>

Contingency Based upon Hard Costs (15/): \$32,100

Soft Costs Contingency (17/): \$36,300

**TOTAL TRAILS \$282,200**

Engineer's Opinion of Costs					
Village 1 - Trails					
Phase 1 Ferrari Ranch Road 1					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	37600	\$3.75	\$141,000
3	Subgrade Prep (AC Trail)	SF	37600	\$0.30	\$11,300
4	Signing and Striping (10' ROW)	LF	3760	\$3.00	\$11,300
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$163,600</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$163,600</b>

Contingency Based upon Hard Costs (15 /): \$24,600  
Soft Costs Contingency (17 /): \$27,800

**TOTAL TRAILS** \$216,000



Engineer's Opinion of Costs					
Village 1 - Trails					
Phase 1 McBean Park Drive 1					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	2800	\$3.25	\$9,100
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	2800	\$0.30	\$800
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$9,900</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$9,900</b>

Contingency Based upon Hard Costs (15%): \$1,500  
Soft Costs Contingency (17%): \$1,700

**TOTAL TRAILS** \$13,100

Engineer's Opinion of Costs					
Village 1 - Trails					
Phase 1 McBean Park Drive 2					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	11360	\$3.25	\$36,900
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	11360	\$0.30	\$3,400
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$40,300</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$40,300</b>

Contingency Based upon Hard Costs (15%): \$6,000

Soft Costs Contingency (17%): \$6,800

**TOTAL TRAILS** \$53,100

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 2 Summary

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$0</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	82100	\$3.75	\$307,900
3	Subgrade Prep (AC Trail)	SF	82100	\$0.30	\$24,600
4	Signing and Striping (10' ROW)	LF	8210	\$3.00	\$24,600
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$357,100</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$357,100</b>

Contingency Based upon Hard Costs (15 /): \$53,600

Soft Costs Contingency (17 /): \$60,700

**TOTAL TRAILS \$471,400**

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 2 Turkey Creek Estates 1

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$0</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	61850	\$3.75	\$232,000
3	Subgrade Prep (AC Trail)	SF	61850	\$0.30	\$18,500
4	Signing and Striping (10' ROW)	LF	6185	\$3.00	\$18,500
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$269,000</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$269,000</b>

Contingency Based upon Hard Costs (15%): \$40,400

Soft Costs Contingency (17%): \$45,700

**TOTAL TRAILS \$355,100**

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 2 Hidden Hills 1

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$0</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	20250	\$3.75	\$75,900
3	Subgrade Prep (AC Trail)	SF	20250	\$0.30	\$6,100
4	Signing and Striping (10' ROW)	LF	2025	\$3.00	\$6,100
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$88,100</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$88,100</b>

Contingency Based upon Hard Costs (15 /): \$13,200

Soft Costs Contingency (17 /): \$15,000

**TOTAL TRAILS** \$116,300

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 3 Summary

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	15200	\$3.25	\$49,400
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	17400	\$3.75	\$65,300
3	Subgrade Prep (AC Trail)	SF	32600	\$0.30	\$9,800
4	Signing and Striping (10' ROW)	LF	1740	\$3.00	\$5,200
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$129,700</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	35900	\$3.75	\$134,600
3	Subgrade Prep (AC Trail)	SF	35900	\$0.30	\$10,800
4	Signing and Striping (10' ROW)	LF	3590	\$3.00	\$10,800
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$156,200</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$285,900</b>

Contingency Based upon Hard Costs (15%): \$42,900

Soft Costs Contingency (17%): \$48,600

**TOTAL TRAILS \$377,400**

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 3 Ferrari Ranch Road 2

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	17400	\$3.75	\$65,300
3	Subgrade Prep (AC Trail)	SF	17400	\$0.30	\$5,300
4	Signing and Striping (10' ROW)	LF	1740	\$3.00	\$5,200
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$75,800</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$75,800</b>

Contingency Based upon Hard Costs (15%): \$11,300

Soft Costs Contingency (17%): \$13,000

**TOTAL TRAILS** \$100,100

Engineer's Opinion of Costs					
Village 1 - Trails					
Phase 3 McBean Park Drive 3					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	2400	\$3.25	\$7,800
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	2400	\$0.30	\$700
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$8,500</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$8,500</b>

Contingency Based upon Hard Costs (15%): \$1,300

Soft Costs Contingency (17%): \$1,400

**TOTAL TRAILS** \$11,200



Engineer's Opinion of Costs					
Village 1 - Trails					
Phase 3 North of McBean Park Drive 4					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	12800	\$3.25	\$41,600
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	12800	\$0.30	\$3,800
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$45,400</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$45,400</b>

Contingency Based upon Hard Costs (15%): \$6,800

Soft Costs Contingency (17%): \$7,700

**TOTAL TRAILS** \$59,900

Engineer's Opinion of Costs					
Village 1 - Trails					
Phase 3 Ingram Slough 2					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$0</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	15700	\$3.75	\$58,800
3	Subgrade Prep (AC Trail)	SF	15700	\$0.30	\$4,800
4	Signing and Striping (10' ROW)	LF	1570	\$3.00	\$4,800
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$68,400</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$68,400</b>

Contingency Based upon Hard Costs (15%): \$10,300  
Soft Costs Contingency (17%): \$11,600

**TOTAL TRAILS** \$90,300

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 3 Ingram Slough 3

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$0</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	5800	\$3.75	\$21,800
3	Subgrade Prep (AC Trail)	SF	5800	\$0.30	\$1,700
4	Signing and Striping (10' ROW)	LF	580	\$3.00	\$1,700
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$25,200</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$25,200</b>

Contingency Based upon Hard Costs (15%): \$3,800

Soft Costs Contingency (17%): \$4,300

**TOTAL TRAILS \$33,300**

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 3 Oak Tree Lane 1

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$0</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	14400	\$3.75	\$54,000
3	Subgrade Prep (AC Trail)	SF	14400	\$0.30	\$4,300
4	Signing and Striping (10' ROW)	LF	1440	\$3.00	\$4,300
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$62,600</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$62,600</b>

Contingency Based upon Hard Costs (15%): \$9,400

Soft Costs Contingency (17%): \$10,600

**TOTAL TRAILS** \$82,600

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 4 Summary

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	6000	\$3.75	\$22,500
3	Subgrade Prep (AC Trail)	SF	6000	\$0.30	\$1,800
4	Signing and Striping (10' ROW)	LF	600	\$3.00	\$1,800
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$26,100</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	6900	\$3.75	\$25,900
3	Subgrade Prep (AC Trail)	SF	6900	\$0.30	\$2,100
4	Signing and Striping (10' ROW)	LF	690	\$3.00	\$2,100
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$30,100</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$56,200</b>

Contingency Based upon Hard Costs (15%): \$8,400

Soft Costs Contingency (17%): \$9,600

**TOTAL TRAILS \$74,200**

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 4 Regional Park 4

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$0</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	6900	\$3.75	\$25,900
3	Subgrade Prep (AC Trail)	SF	6900	\$0.30	\$2,100
4	Signing and Striping (10' ROW)	LF	690	\$3.00	\$2,100
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$30,100</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$30,100</b>

Contingency Based upon Hard Costs (15%): \$4,500

Soft Costs Contingency (17%): \$5,200

**TOTAL TRAILS \$39,800**

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 4 To Tank 1

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	6000	\$3.75	\$22,500
3	Subgrade Prep (AC Trail)	SF	6000	\$0.30	\$1,800
4	Signing and Striping (10' ROW)	LF	600	\$3.00	\$1,800
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$26,100</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$26,100</b>

Contingency Based upon Hard Costs (15%): \$3,900

Soft Costs Contingency (17%): \$4,400

**TOTAL TRAILS** \$34,400

**Engineer's Opinion of Costs**
**Village 1 - Trails**
**Phase 5 Summary**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	55920	\$3.25	\$181,700
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	58850	\$3.75	\$220,700
3	Subgrade Prep (AC Trail)	SF	114770	\$0.30	\$34,400
4	Signing and Striping (10' ROW)	LF	5885	\$3.00	\$17,700
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$454,500</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	34900	\$3.75	\$130,900
3	Subgrade Prep (AC Trail)	SF	34900	\$0.30	\$10,500
4	Signing and Striping (10' ROW)	LF	3490	\$3.00	\$10,500
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$151,900</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$606,400</b>

Contingency Based upon Hard Costs (15%): \$91,000

Soft Costs Contingency (17%): \$103,100

**TOTAL TRAILS \$800,500**



Engineer's Opinion of Costs					
Village 1 - Trails					
Phase 5 South of State Route 193 1					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	6080	\$3.25	\$19,800
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	6080	\$0.30	\$1,800
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$21,600</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$21,600</b>

Contingency Based upon Hard Costs (15%): \$3,200  
Soft Costs Contingency (17%): \$3,700

**TOTAL TRAILS** \$28,500

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 5 State Route 193 2

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	15520	\$3.25	\$50,400
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	15520	\$0.30	\$4,700
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$55,100</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$55,100</b>

Contingency Based upon Hard Costs (15%): \$8,300

Soft Costs Contingency (17%): \$9,400

**TOTAL TRAILS** \$72,800

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 5 State Route 193 3

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	4720	\$3.25	\$15,300
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	4720	\$0.30	\$1,400
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$16,700</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$16,700</b>

Contingency Based upon Hard Costs (15 /): \$2,500

Soft Costs Contingency (17 /): \$2,800

**TOTAL TRAILS** \$22,000

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 5 State Route 193 4

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	13920	\$3.25	\$45,200
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	13920	\$0.30	\$4,200
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$49,400</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$49,400</b>

Contingency Based upon Hard Costs (15%): \$7,400

Soft Costs Contingency (17%): \$8,400

**TOTAL TRAILS** \$65,200

Engineer's Opinion of Costs					
Village 1 - Trails					
PFE Phase 5 State Route 193 5					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	8000	\$3.25	\$26,000
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	8000	\$0.30	\$2,400
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$28,400</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$28,400</b>

Contingency Based upon Hard Costs (15 / ):	\$4,300
Soft Costs Contingency (17 / ):	\$4,800

<b>TOTAL TRAILS</b>	<b>\$37,500</b>
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# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 5 Regional Park 1

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	5550	\$3.75	\$20,800
3	Subgrade Prep (AC Trail)	SF	5550	\$0.30	\$1,700
4	Signing and Striping (10' ROW)	LF	555	\$3.00	\$1,700
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$24,200</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$24,200</b>

Contingency Based upon Hard Costs (15%): \$3,600

Soft Costs Contingency (17%): \$4,100

**TOTAL TRAILS** \$31,900

**Engineer's Opinion of Costs**
**Village 1 - Trails**
**Phase 5 Regional Park 2**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	53300	\$3.75	\$199,900
3	Subgrade Prep (AC Trail)	SF	53300	\$0.30	\$15,900
4	Signing and Striping (10' ROW)	LF	5330	\$3.00	\$16,000
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$231,800</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$231,800</b>

Contingency Based upon Hard Costs (15 /): \$34,800

Soft Costs Contingency (17 /): \$39,400

**TOTAL TRAILS** \$306,000

Engineer's Opinion of Costs					
Village 1 - Trails					
Phase 5 Regional Park 3					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$0</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	4150	\$3.75	\$15,600
3	Subgrade Prep (AC Trail)	SF	4150	\$0.30	\$1,200
4	Signing and Striping (10' ROW)	LF	415	\$3.00	\$1,200
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$18,000</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$18,000</b>

Contingency Based upon Hard Costs (15%): \$2,700

Soft Costs Contingency (17%): \$3,100

**TOTAL TRAILS \$23,800**



# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 5 North South Collector 1

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	7680	\$3.25	\$25,000
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	7680	\$0.30	\$2,300
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$27,300</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$27,300</b>

Contingency Based upon Hard Costs (15 /): \$4,100

Soft Costs Contingency (17 /): \$4,600

**TOTAL TRAILS** \$36,000

Engineer's Opinion of Costs					
Village 1 - Trails					
Phase 5 Ingram Slough 1					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$0</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	8250	\$3.75	\$30,900
3	Subgrade Prep (AC Trail)	SF	8250	\$0.30	\$2,500
4	Signing and Striping (10' ROW)	LF	825	\$3.00	\$2,500
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$35,900</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$35,900</b>

Contingency Based upon Hard Costs (15%):	\$5,400
Soft Costs Contingency (17%):	\$6,100

<b>TOTAL TRAILS</b>	<b>\$47,400</b>
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# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 5 Ingram Slough 4

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$0</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	22500	\$3.75	\$84,400
3	Subgrade Prep (AC Trail)	SF	22500	\$0.30	\$6,800
4	Signing and Striping (10' ROW)	LF	2250	\$3.00	\$6,800
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$98,000</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$98,000</b>

Contingency Based upon Hard Costs (15%): \$14,700

Soft Costs Contingency (17%): \$16,700

**TOTAL TRAILS** \$129,400

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 6 Summary

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$0</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	35900	\$3.75	\$134,600
3	Subgrade Prep (AC Trail)	SF	35900	\$0.30	\$10,800
4	Signing and Striping (10' ROW)	LF	3590	\$3.00	\$10,800
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$156,200</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$156,200</b>

Contingency Based upon Hard Costs (15 /): \$23,400

Soft Costs Contingency (17 /): \$26,600

**TOTAL TRAILS \$206,200**

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 6 Ingram Slough 6

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$0</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	35900	\$3.75	\$134,600
3	Subgrade Prep (AC Trail)	SF	35900	\$0.30	\$10,800
4	Signing and Striping (10' ROW)	LF	3590	\$3.00	\$10,800
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$156,200</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$156,200</b>

Contingency Based upon Hard Costs (15 /): \$23,400

Soft Costs Contingency (17 /): \$26,600

**TOTAL TRAILS** \$206,200

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 7 Summary

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$0</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	30900	\$3.75	\$115,900
3	Subgrade Prep (AC Trail)	SF	30900	\$0.30	\$9,300
4	Signing and Striping (10' ROW)	LF	3090	\$3.00	\$9,300
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$134,500</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$134,500</b>

Contingency Based upon Hard Costs (15 /): \$20,200

Soft Costs Contingency (17 /): \$22,900

**TOTAL TRAILS \$177,600**

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 7 Ingram Slough 5

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$0</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	30900	\$3.75	\$115,900
3	Subgrade Prep (AC Trail)	SF	30900	\$0.30	\$9,300
4	Signing and Striping (10' ROW)	LF	3090	\$3.00	\$9,300
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$134,500</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$134,500</b>

Contingency Based upon Hard Costs (15 /): \$20,200

Soft Costs Contingency (17 /): \$22,900

**TOTAL TRAILS** \$177,600

# Engineer's Opinion of Costs

## Village 1 - Trails

### Phase 8 Summary

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	5600	\$3.25	\$18,200
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	37800	\$3.75	\$141,800
3	Subgrade Prep (AC Trail)	SF	43400	\$0.30	\$13,000
4	Signing and Striping (10' ROW)	LF	3780	\$3.00	\$11,300
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$184,300</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$184,300</b>

Contingency Based upon Hard Costs (15 /): \$27,600

Soft Costs Contingency (17 /): \$31,300

**TOTAL TRAILS \$243,200**



Engineer's Opinion of Costs					
Village 1 - Trails					
Phase 8 Oak Tree Lane 2					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	5600	\$3.25	\$18,200
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	5600	\$0.30	\$1,700
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$19,900</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$19,900</b>

Contingency Based upon Hard Costs (15%): \$3,000  
Soft Costs Contingency (17%): \$3,400

**TOTAL TRAILS** \$26,300

**Engineer's Opinion of Costs**
**Village 1 - Trails, Landscaping and Parks**
**Phase 8 Turkey Creek Golf Course 1**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Trails, Landscaping and Parks</b>					
Village 1					
Infrastructure Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	37800	\$3.75	\$141,800
3	Subgrade Prep (AC Trail)	SF	37800	\$0.30	\$11,300
4	Signing and Striping (10' ROW)	LF	3780	\$3.00	\$11,300
<b>Subtotal Infrastructure Trails Construction Total:</b>					<b>\$164,400</b>
Builder Trails					
1	Asphalt Trail (8' w. 3" th., +6" AB)	SF	0	\$3.25	\$0
2	Asphalt Trail (10' w. 3" th., +6" AB)	SF	0	\$3.75	\$0
3	Subgrade Prep (AC Trail)	SF	0	\$0.30	\$0
4	Signing and Striping (10' ROW)	LF	0	\$3.00	\$0
<b>Subtotal Builders Trails Construction Total:</b>					<b>\$0</b>
<b>Subtotal Trails Construction Total:</b>					<b>\$164,400</b>

Contingency Based upon Hard Costs (15%): \$24,600

Soft Costs Contingency (17%): \$27,900

**TOTAL TRAILS** \$216,900

**APPENDIX 9**

**Lincoln Village 1 Specific Plan**

**Infrastructure Finance Plan**

**Amenities**

**Element**

**(Non-Potable Water, Frontage**

**Landscape & Regional Park Land**

**Acquisition)**

Engineer's Opinion of Costs Village 1 Amenities Summary by Phase	
Description	Amenities
<b>Infrastructure Costs</b>	
Phase 1	\$1,171,500
Phase 2	\$342,600
Phase 3	\$3,080,300
Phase 4	\$390,700
Phase 5	\$563,000
Phase 6	\$164,400
Phase 7	\$184,600
Phase 8	\$0
<b>Subtotal</b>	<b>\$5,897,100</b>

<b>Engineer's Opinion of Costs</b> <b>Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b> <b>Summary</b>					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	22125	\$27.00	\$597,300
2	8" Non-Potable Water Line	LF	5945	\$30.00	\$178,400
3	10" Non-Potable Water Line	LF	2440	\$44.00	\$107,400
4	12" Non-Potable Water Line	LF	6800	\$45.00	\$306,100
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	4	\$25,000.00	\$100,000
6	Frontage Landscaping	SF	194200	\$4.50	\$874,000
7	Water Valves (Assume every 500')	EA	73	\$2,500.00	\$182,500
8	Booster Pump	EA	2	\$75,000.00	\$150,000
9	Pumping Station* / Filtration / Standpipe	EA	1	\$350,000.00	\$350,000
10	Flushing Hydrant (End of Line)	EA	3	\$6,000.00	\$18,000
11	Intake	EA	1	\$45,000.00	\$45,000
12	De-chlorination Station	EA	1	\$75,000.00	\$75,000
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	1	\$50,000.00	\$50,000
14	NID Water Diversion Gate	EA	1	\$15,000.00	\$15,000
15	Lake Grading	CY	109715	\$3.75	\$411,400
16	Lake Stabilization	SF	301710	\$1.33	\$401,300
<b>Construction Total:</b>					<b>\$3,861,400</b>

**Contingency Based upon Hard Costs (15%):** \$579,200

**Soft Costs Contingency (17%):** \$656,500

**Regional Park Acquisition\*\*** \$800,000

**TOTAL AMENITIES** **\$5,897,100**

\* Assumes NID jurisdiction has expanded, therefore no additional Pumping Station is required near Regional Park.

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

<b>Engineer's Opinion of Costs</b> <b>Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b> <b>Phase 1 Summary</b>					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	6220	\$27.00	\$167,900
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	2440	\$44.00	\$107,400
4	12" Non-Potable Water Line	LF	4950	\$45.00	\$222,800
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	3	\$25,000.00	\$75,000
6	Frontage Landscaping	SF	35750	\$4.50	\$160,900
7	Water Valves (Assume every 500')	EA	29	\$2,500.00	\$72,500
8	Booster Pump	EA	1	\$75,000.00	\$75,000
9	Pumping Station* / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	1	\$6,000.00	\$6,000
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$887,500</b>

**Contingency Based upon Hard Costs (15%):** \$133,100

**Soft Costs Contingency (17%):** \$150,900

**Regional Park Acquisition** \$0

**TOTAL AMENITIES \$1,171,500**

\* Assumes NID jurisdiction has expanded, therefore no additional Pumping Station is required near Regional Park.

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 1 Ferrari Ranch Road 2**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	1370	\$27.00	\$37,000
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	1	\$25,000.00	\$25,000
6	Frontage Landscaping	SF	21750	\$4.50	\$97,900
7	Water Valves (Assume every 500')	EA	3	\$2,500.00	\$7,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station* / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$167,400</b>

Contingency Based upon Hard Costs (15%): \$25,100

Soft Costs Contingency (17%): \$28,500

Regional Park Acquisition \$0

**TOTAL AMENITIES \$221,000**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

<b>Engineer's Opinion of Costs</b> <b>Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b> <b>Phase 1 McBean Park Drive 1</b>					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	300	\$45.00	\$13,500
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	1	\$2,500.00	\$2,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$16,000</b>

**Contingency Based upon Hard Costs (15%):** \$2,400

**Soft Costs Contingency (17%):** \$2,700

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$21,100**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 1 McBean Park Drive 2**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	1420	\$45.00	\$63,900
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	3	\$2,500.00	\$7,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$71,400</b>

Contingency Based upon Hard Costs (15%): \$10,700

Soft Costs Contingency (17%): \$12,100

Regional Park Acquisition \$0

**TOTAL AMENITIES \$94,200**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 1 McBean Park Drive 3**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	1960	\$45.00	\$88,200
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	1	\$25,000.00	\$25,000
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	4	\$2,500.00	\$10,000
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$123,200</b>

Contingency Based upon Hard Costs (15%): \$18,500

Soft Costs Contingency (17%): \$20,900

Regional Park Acquisition \$0

**TOTAL AMENITIES \$162,600**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 1 State Route 193 1**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	850	\$27.00	\$23,000
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	2	\$2,500.00	\$5,000
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$28,000</b>

Contingency Based upon Hard Costs (15%): \$4,200

Soft Costs Contingency (17%): \$4,800

Regional Park Acquisition \$0

**TOTAL AMENITIES \$37,000**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 1 State Route 193 2**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	1340	\$27.00	\$36,200
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	3	\$2,500.00	\$7,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$43,700</b>

Contingency Based upon Hard Costs (15%): \$6,600

Soft Costs Contingency (17%): \$7,400

Regional Park Acquisition \$0

**TOTAL AMENITIES \$57,700**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

<b>Engineer's Opinion of Costs</b> <b>Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b> <b>Phase 1 State Route 193 3</b>					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	2660	\$27.00	\$71,700
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	5	\$2,500.00	\$12,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	1	\$6,000.00	\$6,000
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$90,200</b>

**Contingency Based upon Hard Costs (15%):** \$13,500

**Soft Costs Contingency (17%):** \$15,300

**Regional Park Acquisition** \$0

**TOTAL AMENITIES \$119,000**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 1 Oak Tree Lane 6**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	2440	\$44.00	\$107,400
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	14000	\$4.50	\$63,000
7	Water Valves (Assume every 500')	EA	5	\$2,500.00	\$12,500
8	Booster Pump	EA	1	\$75,000.00	\$75,000
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$257,900</b>

**Contingency Based upon Hard Costs (15%):** \$38,600

**Soft Costs Contingency (17%):** \$44,000

**Regional Park Acquisition** \$0

**TOTAL AMENITIES \$340,500**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 1 Oak Tree Lane 7**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	1270	\$45.00	\$57,200
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	1	\$25,000.00	\$25,000
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	3	\$2,500.00	\$7,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$89,700</b>

**Contingency Based upon Hard Costs (15%):** \$13,500

**Soft Costs Contingency (17%):** \$15,200

**Regional Park Acquisition** \$0

**TOTAL AMENITIES \$118,400**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

<b>Engineer's Opinion of Costs</b> <b>Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b> <b>Phase 2 Summary</b>					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	870	\$27.00	\$23,500
2	8" Non-Potable Water Line	LF	2270	\$30.00	\$68,100
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	35100	\$4.50	\$158,000
7	Water Valves (Assume every 500')	EA	4	\$2,500.00	\$10,000
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$259,600</b>

**Contingency Based upon Hard Costs (15%):** \$38,900

**Soft Costs Contingency (17%):** \$44,100

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$342,600**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 2 Ferrari Ranch Road 3**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	35100	\$4.50	\$158,000
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$158,000</b>

**Contingency Based upon Hard Costs (15%):** \$23,700

**Soft Costs Contingency (17%):** \$26,900

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$208,600**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 2 Regional Park 1**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	870	\$27.00	\$23,500
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$23,500</b>

**Contingency Based upon Hard Costs (15%):** \$3,500

**Soft Costs Contingency (17%):** \$4,000

**Regional Park Acquisition** \$0

**TOTAL AMENITIES \$31,000**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 2 Oak Tree Lane 4**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	1720	\$30.00	\$51,600
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	3	\$2,500.00	\$7,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$59,100</b>

**Contingency Based upon Hard Costs (15%):** \$8,800

**Soft Costs Contingency (17%):** \$10,000

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$77,900**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 2 Oak Tree Lane 5**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	550	\$30.00	\$16,500
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	1	\$2,500.00	\$2,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$19,000</b>

**Contingency Based upon Hard Costs (15%):** \$2,900

**Soft Costs Contingency (17%):** \$3,200

**Regional Park Acquisition** \$0

**TOTAL AMENITIES \$25,100**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 3 Summary**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	700	\$27.00	\$18,900
2	8" Non-Potable Water Line	LF	3675	\$30.00	\$110,300
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	1850	\$45.00	\$83,300
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	43300	\$4.50	\$194,900
7	Water Valves (Assume every 500')	EA	12	\$2,500.00	\$30,000
8	Booster Pump	EA	1	\$75,000.00	\$75,000
9	Pumping Station / Filtration / Standpipe	EA	1	\$350,000.00	\$350,000
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	1	\$45,000.00	\$45,000
12	De-chlorination Station	EA	1	\$75,000.00	\$75,000
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	1	\$50,000.00	\$50,000
14	NID Water Diversion Gate	EA	1	\$15,000.00	\$15,000
15	Lake Grading	CY	109715	\$3.75	\$411,400
16	Lake Stabilization	SF	301710	\$1.33	\$401,300
<b>Construction Total:</b>					<b>\$1,860,100</b>

**Contingency Based upon Hard Costs (15%):** \$279,000

**Soft Costs Contingency (17%):** \$316,200

**Regional Park Acquisition** \$625,000

**TOTAL AMENITIES \$3,080,300**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

<b>Engineer's Opinion of Costs</b> <b>Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b> <b>Phase 3 Ferrari Ranch Road 4</b>					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	17250	\$4.50	\$77,600
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$77,600</b>

**Contingency Based upon Hard Costs (15%):** \$11,600

**Soft Costs Contingency (17%):** \$13,200

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$102,400**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 3 Ferrari Ranch Road 5**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	700	\$27.00	\$18,900
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	9900	\$4.50	\$44,600
7	Water Valves (Assume every 500')	EA	1	\$2,500.00	\$2,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$66,000</b>

**Contingency Based upon Hard Costs (15%):** \$9,900

**Soft Costs Contingency (17%):** \$11,200

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$87,100**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 3 Oak Tree Lane 3**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	1470	\$30.00	\$44,100
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	3	\$2,500.00	\$7,500
8	Booster Pump	EA	1	\$75,000.00	\$75,000
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$126,600</b>

Contingency Based upon Hard Costs (15%): \$19,000

Soft Costs Contingency (17%): \$21,500

Regional Park Acquisition \$0

**TOTAL AMENITIES \$167,100**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



<b>Engineer's Opinion of Costs</b> <b>Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b> <b>Phase 3 Oak Tree Lane 8</b>					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	1850	\$45.00	\$83,300
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	10400	\$4.50	\$46,800
7	Water Valves (Assume every 500')	EA	4	\$2,500.00	\$10,000
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station* / Filtration / Standpipe	EA	1	\$350,000.00	\$350,000
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	1	\$45,000.00	\$45,000
12	De-chlorination Station	EA	1	\$75,000.00	\$75,000
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	1	\$50,000.00	\$50,000
14	NID Water Diversion Gate	EA	1	\$15,000.00	\$15,000
15	Lake Grading	CY	109715	\$3.75	\$411,400
16	Lake Stabilization	SF	301710	\$1.33	\$401,300
<b>Construction Total:</b>					<b>\$1,487,800</b>

**Contingency Based upon Hard Costs (15%):** \$223,200

**Soft Costs Contingency (17%):** \$252,900

**Regional Park Acquisition** \$0

**TOTAL AMENITIES \$1,963,900**

\* Assumes NID jurisdiction has expanded, therefore no additional Pumping Station is required near Regional Park.

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

<b>Engineer's Opinion of Costs</b> <b>Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b> <b>Phase 3 Oak Tree Lane 9</b>					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	1240	\$30.00	\$37,200
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	13200	\$4.50	\$59,400
7	Water Valves (Assume every 500')	EA	2	\$2,500.00	\$5,000
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$101,600</b>

**Contingency Based upon Hard Costs (15%):** \$15,200

**Soft Costs Contingency (17%):** \$17,300

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$134,100**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

Engineer's Opinion of Costs					
Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition					
Phase 3 Oak Tree Lane 10					
Item #	Description	Unit	Quantity	Unit Price	Amount
AMENITIES - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	965	\$30.00	\$29,000
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	9800	\$4.50	\$44,100
7	Water Valves (Assume every 500')	EA	2	\$2,500.00	\$5,000
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$78,100</b>

Contingency Based upon Hard Costs (15%): \$11,700

Soft Costs Contingency (17%): \$13,300

Regional Park Acquisition \$0

**TOTAL AMENITIES \$103,100**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 4 Summary**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	5125	\$27.00	\$138,400
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	10	\$2,500.00	\$25,000
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$163,400</b>

**Contingency Based upon Hard Costs (15%):** \$24,500

**Soft Costs Contingency (17%):** \$27,800

**Regional Park Acquisition** \$175,000

**TOTAL AMENITIES** **\$390,700**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

<b>Engineer's Opinion of Costs</b>					
<b>Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
<b>Phase 4 Oak Tree Lane 2</b>					
<b>Item #</b>	<b>Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Amount</b>
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	1620	\$27.00	\$43,700
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	3	\$2,500.00	\$7,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$51,200</b>

**Contingency Based upon Hard Costs (15%):** \$7,700

**Soft Costs Contingency (17%):** \$8,700

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$67,600**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition  
Phase 4 North South Collector 1**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	985	\$27.00	\$26,600
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	2	\$2,500.00	\$5,000
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$31,600</b>

Contingency Based upon Hard Costs (15%): \$4,700

Soft Costs Contingency (17%): \$5,400

Regional Park Acquisition \$0

**TOTAL AMENITIES \$41,700**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 4 Collector Loop 1**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	2520	\$27.00	\$68,100
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	5	\$2,500.00	\$12,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$80,600</b>

**Contingency Based upon Hard Costs (15%):** \$12,100

**Soft Costs Contingency (17%):** \$13,700

**Regional Park Acquisition** \$0

**TOTAL AMENITIES \$106,400**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 5 Summary**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	2920	\$27.00	\$78,800
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	72600	\$4.50	\$326,700
7	Water Valves (Assume every 500')	EA	6	\$2,500.00	\$15,000
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	1	\$6,000.00	\$6,000
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$426,500</b>

Contingency Based upon Hard Costs (15%): \$64,000

Soft Costs Contingency (17%): \$72,500

Regional Park Acquisition \$0

**TOTAL AMENITIES \$563,000**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 5 Oak Tree Lane 1**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	670	\$27.00	\$18,100
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	60900	\$4.50	\$274,000
7	Water Valves (Assume every 500')	EA	1	\$2,500.00	\$2,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	1	\$6,000.00	\$6,000
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$300,600</b>

**Contingency Based upon Hard Costs (15%):** \$45,000

**Soft Costs Contingency (17%):** \$51,000

**Regional Park Acquisition** \$0

**TOTAL AMENITIES \$396,600**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 5 Sierra College Blvd. 1**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	5700	\$4.50	\$25,700
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$25,700</b>

**Contingency Based upon Hard Costs (15%):** \$3,900

**Soft Costs Contingency (17%):** \$4,400

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$34,000**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 5 Sierra College Blvd. 2**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	0	\$27.00	\$0
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	6000	\$4.50	\$27,000
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$27,000</b>

**Contingency Based upon Hard Costs (15%):** \$4,100

**Soft Costs Contingency (17%):** \$4,600

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$35,700**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 5 North South Collector 2**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	1350	\$27.00	\$36,500
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	3	\$2,500.00	\$7,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$44,000</b>

Contingency Based upon Hard Costs (15%): \$6,600

Soft Costs Contingency (17%): \$7,500

Regional Park Acquisition \$0

**TOTAL AMENITIES \$58,100**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 5 Collector Loop 2**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	900	\$27.00	\$24,200
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	2	\$2,500.00	\$5,000
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$29,200</b>

Contingency Based upon Hard Costs (15%): \$4,400

Soft Costs Contingency (17%): \$5,000

Regional Park Acquisition \$0

**TOTAL AMENITIES \$38,600**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 6 Summary**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	3870	\$27.00	\$104,500
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	8	\$2,500.00	\$20,000
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$124,500</b>

Contingency Based upon Hard Costs (15%): \$18,700

Soft Costs Contingency (17%): \$21,200

Regional Park Acquisition \$0

**TOTAL AMENITIES \$164,400**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 6 Collector Loop 3**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	3870	\$27.00	\$104,500
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	8	\$2,500.00	\$20,000
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$124,500</b>

Contingency Based upon Hard Costs (15%): \$18,700

Soft Costs Contingency (17%): \$21,200

Regional Park Acquisition \$0

**TOTAL AMENITIES \$164,400**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

<b>Engineer's Opinion of Costs</b> <b>Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b> <b>Phase 7 Summary</b>					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	2420	\$27.00	\$65,300
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	1	\$25,000.00	\$25,000
6	Frontage Landscaping	SF	7450	\$4.50	\$33,500
7	Water Valves (Assume every 500')	EA	4	\$2,500.00	\$10,000
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	1	\$6,000.00	\$6,000
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$139,800</b>

**Contingency Based upon Hard Costs (15%):** \$21,000

**Soft Costs Contingency (17%):** \$23,800

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$184,600**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.



<b>Engineer's Opinion of Costs</b> <b>Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b> <b>Phase 7 Oak Tree Lane 11</b>					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	1520	\$27.00	\$41,000
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	7450	\$4.50	\$33,500
7	Water Valves (Assume every 500')	EA	3	\$2,500.00	\$7,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	1	\$6,000.00	\$6,000
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$88,000</b>

**Contingency Based upon Hard Costs (15%):** \$13,200

**Soft Costs Contingency (17%):** \$15,000

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$116,200**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

<b>Engineer's Opinion of Costs</b> <b>Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b> <b>Phase 7 Virginiatown Road 1</b>					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	200	\$27.00	\$5,400
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	1	\$25,000.00	\$25,000
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$30,400</b>

**Contingency Based upon Hard Costs (15%):** \$4,600

**Soft Costs Contingency (17%):** \$5,100

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$40,100**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**Engineer's Opinion of Costs**
**Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping & Regional Park Acquisition**
**Phase 7 Virginiatown Road 2**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	600	\$27.00	\$16,200
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	1	\$2,500.00	\$2,500
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$18,700</b>

**Contingency Based upon Hard Costs (15%):** \$2,800

**Soft Costs Contingency (17%):** \$3,200

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$24,700**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

<b>Engineer's Opinion of Costs</b> <b>Village 1 - Amenities - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b> <b>Phase 7 Virginiatown Road 3</b>					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>AMENITIES - Includes Non-Potable Water, Frontage Landscaping &amp; Regional Park Acquisition</b>					
1	6" Non-Potable Water Line	LF	100	\$27.00	\$2,700
2	8" Non-Potable Water Line	LF	0	\$30.00	\$0
3	10" Non-Potable Water Line	LF	0	\$44.00	\$0
4	12" Non-Potable Water Line	LF	0	\$45.00	\$0
5	Temporary Connection to Domestic w/ Backflow Prevention	EA	0	\$25,000.00	\$0
6	Frontage Landscaping	SF	0	\$4.50	\$0
7	Water Valves (Assume every 500')	EA	0	\$2,500.00	\$0
8	Booster Pump	EA	0	\$75,000.00	\$0
9	Pumping Station / Filtration / Standpipe	EA	0	\$350,000.00	\$0
10	Flushing Hydrant (End of Line)	EA	0	\$6,000.00	\$0
11	Intake	EA	0	\$45,000.00	\$0
12	De-chlorination Station	EA	0	\$75,000.00	\$0
13	Lake Aeration - Oak Tree Lane (Walkup Ranch)	EA	0	\$50,000.00	\$0
14	NID Water Diversion Gate	EA	0	\$15,000.00	\$0
15	Lake Grading	CY	0	\$3.75	\$0
16	Lake Stabilization	SF	0	\$1.33	\$0
<b>Construction Total:</b>					<b>\$2,700</b>

**Contingency Based upon Hard Costs (15%):** \$400

**Soft Costs Contingency (17%):** \$500

**Regional Park Acquisition** \$0

**TOTAL AMENITIES** **\$3,600**

\*\* Assumes Regional Park to be purchased in 2 phases; First Phase will be 28.6 acres. If Placer County elects to relocate corporation yard, then remaining 4 acres will be purchased.

**APPENDIX 10**

**Lincoln Village 1 Specific Plan**

**Infrastructure Finance Plan**

**PFE Construction Items Table, PFE**

**Maps and City Impact Fees**

<b>Engineer's Opinion of Costs</b> <b>Village 1 PFE Eligible Construction Items</b> <b>Backbone Roadway</b>			
Item #	Improvement	Description	Total Cost
<b>Backbone Roadway System</b>			
V1R1	Ferrari Ranch Road South	Along Ferrari Ranch Road South from the existing bridge east of Lincoln Blvd. to McBean Park Drive, 2 lanes, median landscaping and 2 traffic signals at Ingram Parkway and Sun City Blvd.	\$3,603,100
V1R2	Ferrari Ranch Road/McBean Park Drive Intersection Traffic Signal	Including full signal appurtenances and associated pavement widening and necessary intersection revisions.	\$642,500
V1R3	Ferrari Ranch Road North	From the intersection of McBean Park Drive and Ferrari Ranch Road north to the end of the transition from a 4 lane road to 2 lane road, 2 inside lanes and transition.	\$245,800
V1R4	Oak Tree Lane/Sierra College Boulevard Intersection Traffic Signal	Including full signal appurtenances and associated pavement widening.	\$1,826,100
V1R5	Oak Tree Lane South	In addition to V1R6, west side of Oak Tree Lane South from the southern boundary of the condo parcel to the southeast corner of the church parcel, 1 lane, curb gutter & sidewalk, 1/2 median landscaping and frontage landscaping.	\$526,200
V1R6	Oak Tree Lane South	Along west side of Oak Tree Lane South in front of existing condo parcel, 1 lane, curb gutter & sidewalk, 1/2 median landscaping and frontage landscaping.	\$237,100
V1R7	Oak Tree Lane/McBean Park Drive Intersection Traffic Signal	Including full signal appurtenances and associated pavement widening.	\$713,800
V1R8	Oak Tree Lane North	From the intersection of Oak Tree Lane and McBean Park Drive north to the entrance of La Bella Rosa Subdivision, 2 inside lanes, 12'x5' Arch Pipe Culvert under PFE inside lanes at NID canal crossing.	\$716,700
V1R9	Oak Tree Lane/School South Entrance Intersection Traffic Signal	Including full signal appurtenances and associated pavement widening.	\$455,500
V1R10	Oak Tree Lane/School North Entrance Intersection Traffic Signal	Including full signal appurtenances and associated pavement widening.	\$455,300
V1R11	Oak Tree Lane North	From entrance to La Bella Rosa Subdivision to the intersection of Ferrari Ranch Road and Oak Tree Lane, 2 inside lanes	\$172,300
V1R12	Oak Tree Lane/Ferrari Ranch Road Intersection Traffic Signal	Including full signal appurtenances and associated pavement widening.	\$387,800
V1R13	Oak Tree Lane North	2-lane box girder bridge across Auburn Ravine, with span of approximately 400 LF includes abutments and approaches.	\$7,260,100
V1R14	Oak Tree Lane North	From north end of bridge to the intersection of Virginiatown Road, 2 inside lanes.	\$821,200

**Engineer's Opinion of Costs**  
**Village 1 PFE Eligible Construction Items**  
**Backbone Roadway**

Item #	Improvement	Description	Total Cost
<b>Backbone Roadway System</b>			
V1R15	Oak Tree Lane North	From the intersection of Oak Tree Lane and Virginiatown Road, south along the west side of Oak Tree Lane North to the southeast corner of the City property, 1 lane, curb, gutter and sidewalk.	\$250,700
V1R16	Virginiatown Road	From the intersection of Oak Tree Lane and Virginiatown Road, west along the south side of Virginiatown Road to the northwest corner of the City property, 1 lane.	\$286,300
V1R17	McBean Park Drive	South side of McBean Park Drive between west side of Ferrari Ranch Road and Oak Tree Lane, 1 lane, NEV lane, 1/2 median landscaping and frontage Landscaping (35' wide overall City may elect to spread or disburse over entire width of landscape corridor).	\$1,068,800
V1R18	State Route 193	South side of State Route 193 from Oak Tree Lane to east of the Collector/Turkey Creek intersection, 1 outside lane, including transition and AB shoulder.	\$584,500
V1R19	McBean Park Drive	From the intersection of Ferrari Ranch Road and McBean Park Drive to intersection of Oak Tree Lane and McBean Park Drive, 2 lanes.	\$1,171,600
V1R20	State Route 193	North side of State Route 193 from Oak Tree Lane to east of the Collector/Turkey Creek intersection, 1 outside lane, including transition and AB shoulder.	\$484,500
V1R21	State Route 193/North South Collector Intersection Traffic Signal	Including full signal appurtenances and associated pavement widening.	\$432,100
<b>Total</b>			<b>\$22,342,000</b>

# Engineer's Opinion of Costs

## Village 1 PFE Eligible Construction Items

### Backbone Water

Item #	Improvement	Description	Total Cost
<b>Water System</b>			
V1W1	30" Water Line	From the water tank south of Village 1 to Oak Tree Lane South, upsize from 16" water line.	\$ 273,100
V1W2	30" Water Line	From W1, east along Oak Tree Lane South to the entrance of the Hidden Hills subdivision, upsize from 16" water line.	\$ 448,500
V1W3	30" Water Line	Along Oak Tree Lane South, from the entrance of the Hidden Hills subdivision to the connection with the proposed 24" water line, upsize from 16" water line.	\$ 147,800
V1W4	18" Water Line	Along Oak Tree Lane South, from the end of the 30" pipe to the intersection of Oak Tree Lane and McBean Park Drive, upsize from 16" water line.	\$ 65,800
V1W5	24" Water Line	Relocate 24" Waterline in the area of the new culvert crossing of Oak Tree Lane approximately 200 LF	\$ 17,200
V1W6	24" Water Line	Along Oak Tree Lane North from Oak Tree Lane and McBean Park Drive intersection to the entrance to La Bella Rosa subdivision, upsize from 16" water line.	\$ 332,300
V1W7	24" Water Line	Along Oak Tree Lane North, from the entrance to La Bella Rosa subdivision to Ferrari Ranch Road and Oak Tree Lane intersection, upsize from 16" water line.	\$ 105,400
V1W8	18" Water Line	Along Oak Tree Lane North, from the intersection of Ferrari Ranch Road and Oak Tree Lane to Virginiatown Road, upsize from 16" water line.	\$ 194,700
V1W9	18" Water Line	Along Virginiatown Road from the end of the existing 18" water line, east to 600 LF past the intersection of Oak Tree Lane and Virginiatown Road, upsize from 16" water line.	\$ 35,700
V1W10	18" Water Line	Along State Route 193, east from Oak Tree Lane to east entrance of Turkey Creek Estates upsize from 16" water line.	\$ 115,200
<b>Total</b>			<b>\$ 1,735,700</b>

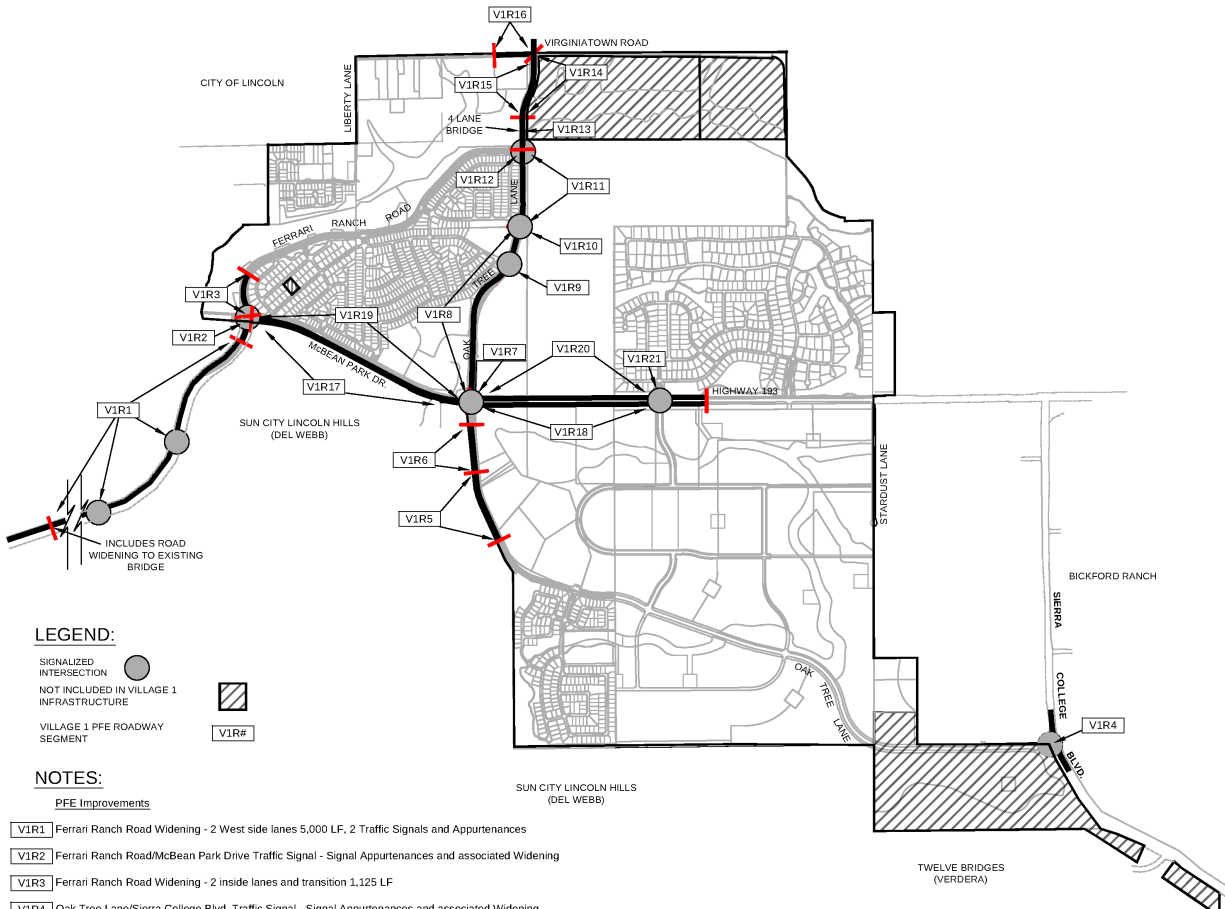
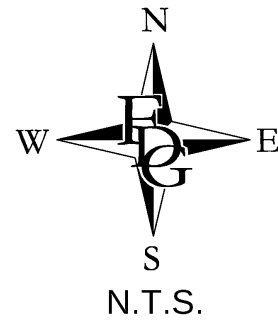


Engineer's Opinion of Costs			
Village 1 PFE Eligible Construction Items			
Backbone Wastewater			
Item #	Improvement	Description	Total Cost
<b>Wastewater System</b>			
V1S1	30" Sewer Line	Along Ferrari Ranch Road North from the existing sewer at Ferrari Ranch Road and McBean Park Drive intersection, to the entrance to the bore and jack crossing, upsize from 12" sewer line.	\$ 362,000
V1S2	24" Sewer Line	Along Ferrari Ranch Road North, from the bore and jack crossing to southwest boundary of La Bella Rosa subdivision, upsize from 10" sewer line.	\$ 194,800
V1S3	24" Sewer Line	Along Ferrari Ranch Road North, from the southwest corner of La Bella Rosa subdivision to the intersection of Ferrari Ranch Road and Oak Tree Lane, full improvement cost.	\$ 434,800
<b>Total</b>			<b>\$ 991,600</b>

<b>Engineer's Opinion of Costs</b> <b>Village 1 PFE Eligible Construction Items</b> <b>Backbone Drainage</b>			
<b>Item #</b>	<b>Improvement</b>	<b>Description</b>	<b>Total Cost</b>
<b>Storm Drainage System</b>			
V1D1	Ingram Slough Dam	Improve the existing dam, located east of Oak Tree Lane South; which benefits Lincoln Hills in addition to Village 1.	\$ 1,320,000
<b>Total</b>			<b>\$ 1,320,000</b>

<b>Engineer's Opinion of Costs</b> <b>Village 1 PFE Eligible Construction Items</b> <b>Frontage Landscaping</b>			
<b>Item #</b>	<b>Improvement</b>	<b>Description</b>	<b>Total Cost</b>
<b>Frontage Landscaping</b>			
V1FL1	Ferrari Ranch Road South	Along Ferrari Ranch Road South from the existing bridge east of Lincoln Blvd. to McBean Park Drive, 5,000 LF of landscaping.	\$297,100
V1FL 2	McBean Park Drive	South side of McBean Park Drive between west side of Ferrari Ranch Road and Oak Tree Lane, 3,760 LF of landscaping along Sun City Lincoln Hills.	\$763,000
V1FL 3	Oak Tree Lane South	Along west side of Oak Tree Lane South in front of existing condo parcel, frontage landscaping.	\$45,800
V1FL 4	Oak Tree Lane South	In addition to the FL3, west side of Oak Tree Lane South from the southern boundary of the condo parcel to the southeast corner of the church parcel, frontage landscaping.	\$102,300
V1FL 5	Oak Tree Lane North	From the intersection of Oak Tree Lane and Virginiatown Road, south along the west side of Oak Tree Lane North to the southeast corner of the City property.	\$11,500
V1FL 6	Virginiatown Road	From the intersection of Oak Tree Lane and Virginiatown Road, west along the south side of Virginiatown Road to the northwest corner of the City property.	\$17,800
<b>Total</b>			<b>\$1,237,500</b>

Engineer's Opinion of Costs			
Village 1 PFE Eligible Construction Items			
Trails			
Item #	Improvement	Description	Total Cost
<b>Trails System</b>			
V1TR1	10' Wide Trail	Along Ferrari Ranch Road North from the Ferrari Ranch Road and McBean Park Drive intersection to Ferrari Ranch Road and the La Bella Rosa subdivision entrance. Asphalt trail and striping, 3,760 LF.	\$ 216,000
V1TR2	10' Wide Trail	Along Ferrari Ranch Road North from the entrance to La Bella Rosa subdivision to the intersection of Ferrari Ranch Road and Oak Tree Lane, Asphalt trail and striping, 1,710 LF.	\$ 126,400
V1TR3	8' Wide Trail	Along McBean Park Drive from the Ferrari Ranch Road and McBean Park Drive intersection to the southeast corner of the Epick 3 subdivision, Asphalt trail, 350 LF.	\$ 13,100
V1TR4	8' Wide Trail	Along McBean Park Drive from the southeast corner of the Epick 3 subdivision to the southeast corner of the Enclave at Horizon Edge subdivision, Asphalt trail, 1420 LF.	\$ 53,200
V1TR5	8' Wide Trail	Along McBean Park Drive from the southeast corner of the Enclave at Horizon Edge subdivision to the entrance to the Walkup Ranch subdivision, Asphalt Trail, 300 LF.	\$ 11,200
V1TR6	8' Wide Trail	Along McBean Park Drive, from the entrance to Walkup Ranch subdivision to the McBean Park Drive and Oak Tree Lane intersection, Asphalt Trail, 1,600 LF.	\$ 59,900
V1TR7	8' Wide Trail	Along the south side of State Route 193, from the intersection of Oak Tree Lane and State Route 193 to the northeast corner of APN: 021—274-033 (Highmark parcel), Asphalt Trail, 760 LF.	\$ 28,500
V1TR8	8' Wide Trail	Along the south side of State Route 193, from the northeast corner of APN: 021—274-033 (Highmark parcel), to the North/South Collector Road, Asphalt trail, 1,940 LF.	\$ 72,800
V1TR9	8' Wide Trail	Along the south side of State Route 193, from the North/South Collector Road to 590 LF east of the North/ South Collector Road. Asphalt trail, 590 LF.	\$ 22,000
V1TR10	8' Wide Trail	Along the south side of State Route 193, from 590 LF east of the North/South Collector Road to the northwest corner of APN: 021-274-037. Asphalt Trail, 1,740 LF.	\$ 65,200
V1TR11	8' Wide Trail	Along the south side of State Route 193, from the northwest corner of APN: 021-274-037 to the eastern boundary of Village 1. Asphalt Trail, 1,000 LF.	\$ 37,500
V1TR12	10' Wide Trail	Connecting Oak Tree Lane South with the proposed North/South Collector Road. This trail will also go around the existing lake feature located near the Regional Park. Asphalt Trail and striping, 5,885 LF	\$ 338,000
V1TR13	10' Wide Trail	Through the proposed park connecting the North and South Collector Road. Asphalt trail and striping, 960 LF	\$ 36,000
V1TR14	10' Wide Trail	At the southern border of Village 1 (near the existing water tank) to connect the existing trail system to Village 1. Asphalt trail and striping, 600 LF.	\$ 34,400
V1TR15	8' Wide Trail	From Oak Tree Lane North to the eastern Village 1 boundary across the top of the Turkey Creek Golf Course. Asphalt Trail, 3,780 LF.	\$ 216,900
<b>Total</b>			<b>\$ 1,331,100</b>



#### LEGEND:

- SIGNALIZED INTERSECTION
- NOT INCLUDED IN VILLAGE 1 INFRASTRUCTURE
- VILLAGE 1 PFE ROADWAY SEGMENT
- V1R#

#### NOTES:

##### PFE Improvements

- V1R1 Ferrari Ranch Road Widening - 2 West side lanes 5,000 LF, 2 Traffic Signals and Appurtenances
- V1R2 Ferrari Ranch Road/McBean Park Drive Traffic Signal - Signal Appurtenances and associated Widening
- V1R3 Ferrari Ranch Road Widening - 2 inside lanes and transition 1,125 LF
- V1R4 Oak Tree Lane/Sierra College Blvd. Traffic Signal - Signal Appurtenances and associated Widening
- V1R5 Oak Tree Lane Widening - 1 Lane, 1/2 Median Landscaping, Frontage Landscaping 1,230 LF
- V1R6 Oak Tree Lane Widening - 1 Lane, 1/2 Median Landscaping, Frontage Landscaping 550 LF
- V1R7 Oak Tree Lane/McBean Park Drive Traffic Signal - Signal Appurtenances and associated Widening
- V1R8 Oak Tree Lane Widening - 2 inside lanes 3030 LF
- V1R9 Oak Tree Lane/School South Entrance Traffic Signal - Signal Appurtenances and associated Widening
- V1R10 Oak Tree Lane/School North Entrance Traffic Signal - Signal Appurtenances and associated Widening
- V1R11 Oak Tree Lane Widening - 2 inside lanes 965 LF
- V1R12 Oak Tree Lane/Ferrari Ranch Road Traffic Signal - Signal Appurtenances and associated Widening
- V1R13 Oak Tree Lane East Side Bridge - 2 Lane Bridge, with Abutments and Approaches
- V1R14 Oak Tree Lane Widening - 2 inside lanes 980 LF
- V1R15 Oak Tree Lane Widening - 1 Lane, Curb and Gutter, Sidewalk and Frontage Landscaping in Front of City of Lincoln Parcel
- V1R16 Virginiatown Road Widening - 1 Lane and Frontage Landscaping in Front of City of Lincoln Parcel
- V1R17 McBean Park Drive Widening - 1 Lane, 1/2 Landscape Median, 1 NEV Lane and 35' wide frontage landscaping, 3,670 LF
- V1R18 State Route 193, 1 South Side Lane 3,050 LF
- V1R19 McBean Park Drive Widening - 2 Lanes, 3,670 LF
- V1R20 State Route 193, 1 North Side Lane 3,050 LF
- V1R21 State Route 193/North Collector Traffic Signal - Signal Appurtenances and associated Widening

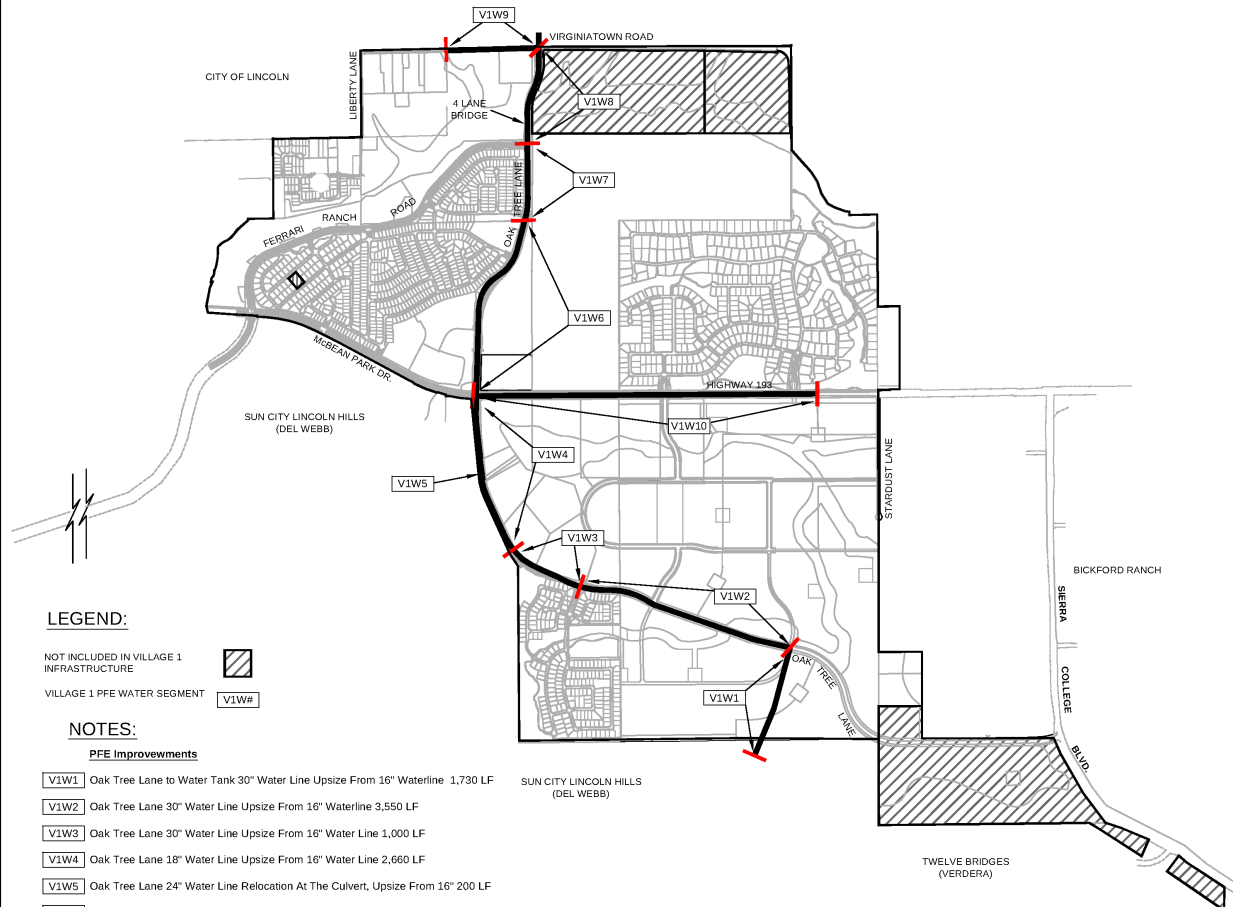
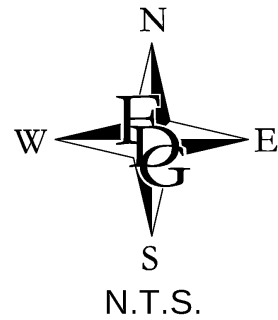
Disclaimer:  
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## Appendix 10.1: PFE Improvements Map - Roads

Revised 8/9/2016



#### LEGEND:

NOT INCLUDED IN VILLAGE 1  
INFRASTRUCTURE

VILLAGE 1 PFE WATER SEGMENT

#### NOTES:

##### PFE Improvements

- V1W1 Oak Tree Lane to Water Tank 30" Water Line Upsize From 16" Waterline 1,730 LF
- V1W2 Oak Tree Lane 30" Water Line Upsize From 16" Waterline 3,550 LF
- V1W3 Oak Tree Lane 30" Water Line Upsize From 16" Water Line 1,000 LF
- V1W4 Oak Tree Lane 18" Water Line Upsize From 16" Water Line 2,660 LF
- V1W5 Oak Tree Lane 24" Water Line Relocation At The Culvert, Upsize From 16" 200 LF
- V1W6 Oak Tree Lane 24" Water Line Upsize From 16" Water Line 3,030 LF
- V1W7 Oak Tree Lane 24" Water Line Upsize From 16" 965 LF
- V1W8 Oak Tree Lane 24" Water Line Upsize From 16" 1,365 LF
- V1W9 Virginiatown Road 18" Water Line Upsize From 16" Water Line 2,000 LF
- V1W10 State Route 193 18" Water Line Upsize From 16" Water Line 5,050 LF

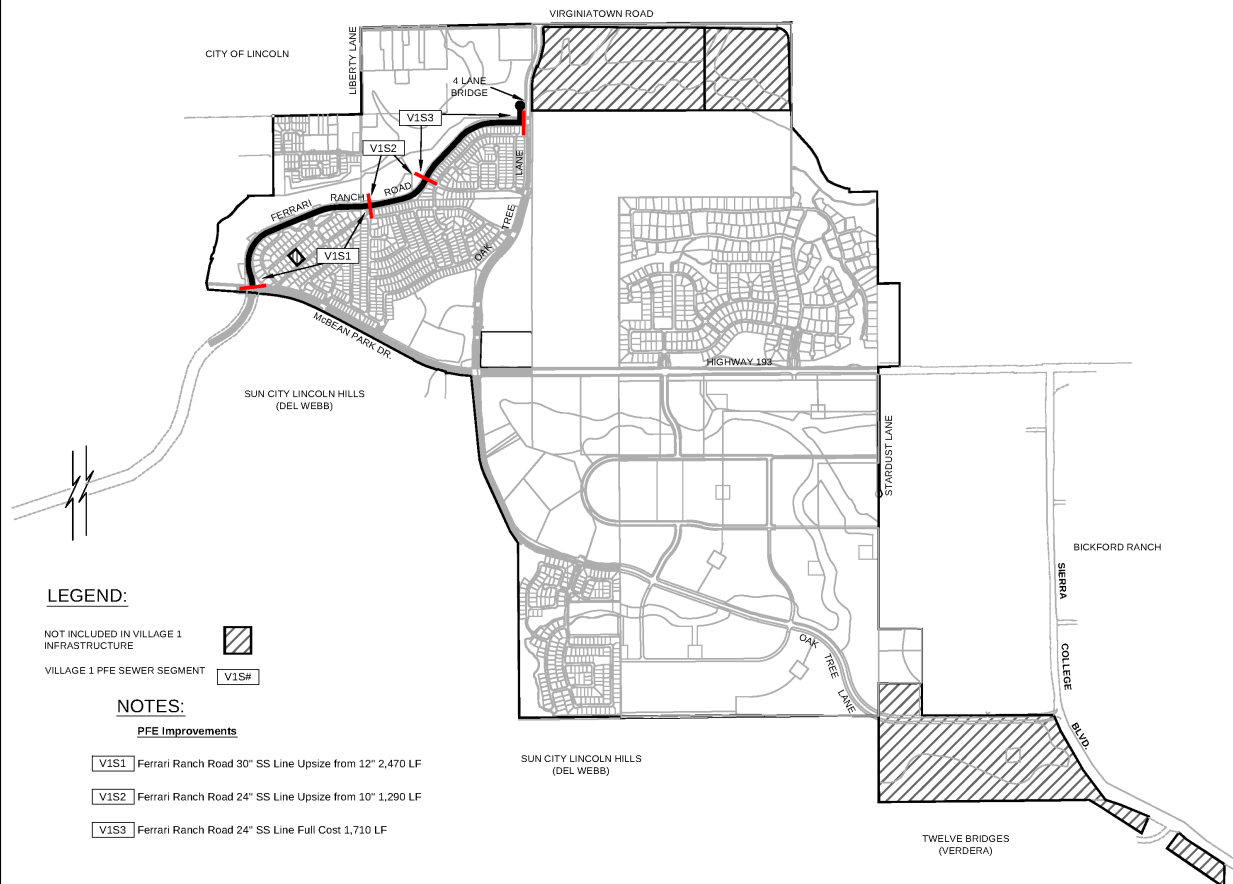
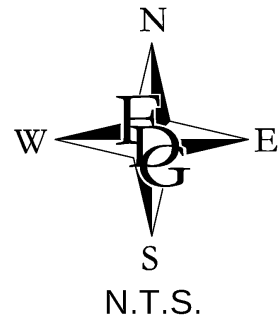
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## Appendix 10.2: PFE Improvements Map - Water

Revised 8/9/2016



**LEGEND:**

NOT INCLUDED IN VILLAGE 1  
INFRASTRUCTURE



VILLAGE 1 PFE SEWER SEGMENT

V1S#

**NOTES:**

**PFE Improvements**

V1S1 Ferrari Ranch Road 30" SS Line Upsize from 12" 2,470 LF

V1S2 Ferrari Ranch Road 24" SS Line Upsize from 10" 1,290 LF

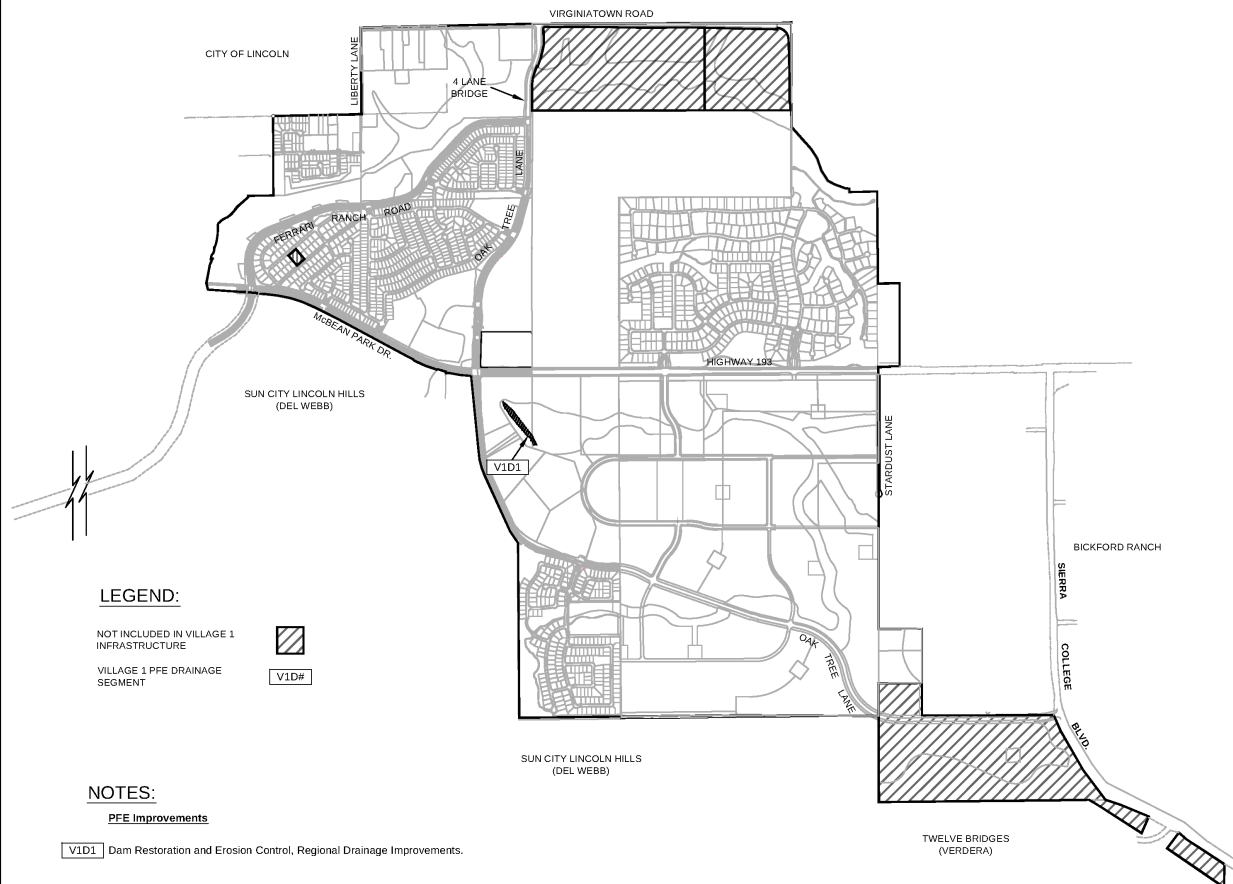
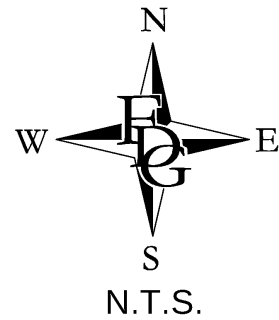
V1S3 Ferrari Ranch Road 24" SS Line Full Cost 1,710 LF

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Revised 8/9/2016

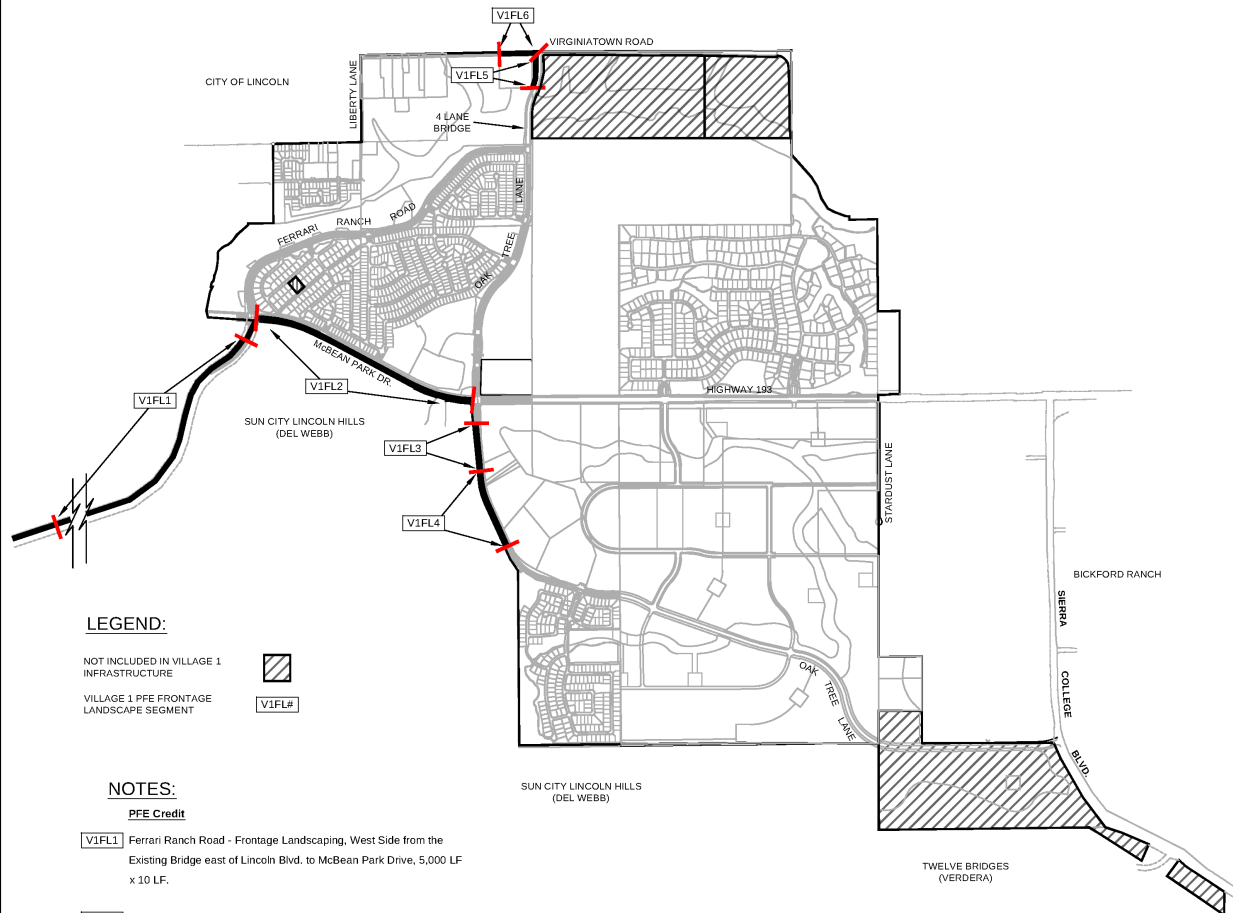
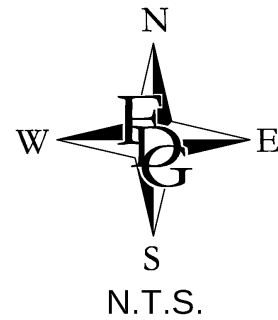


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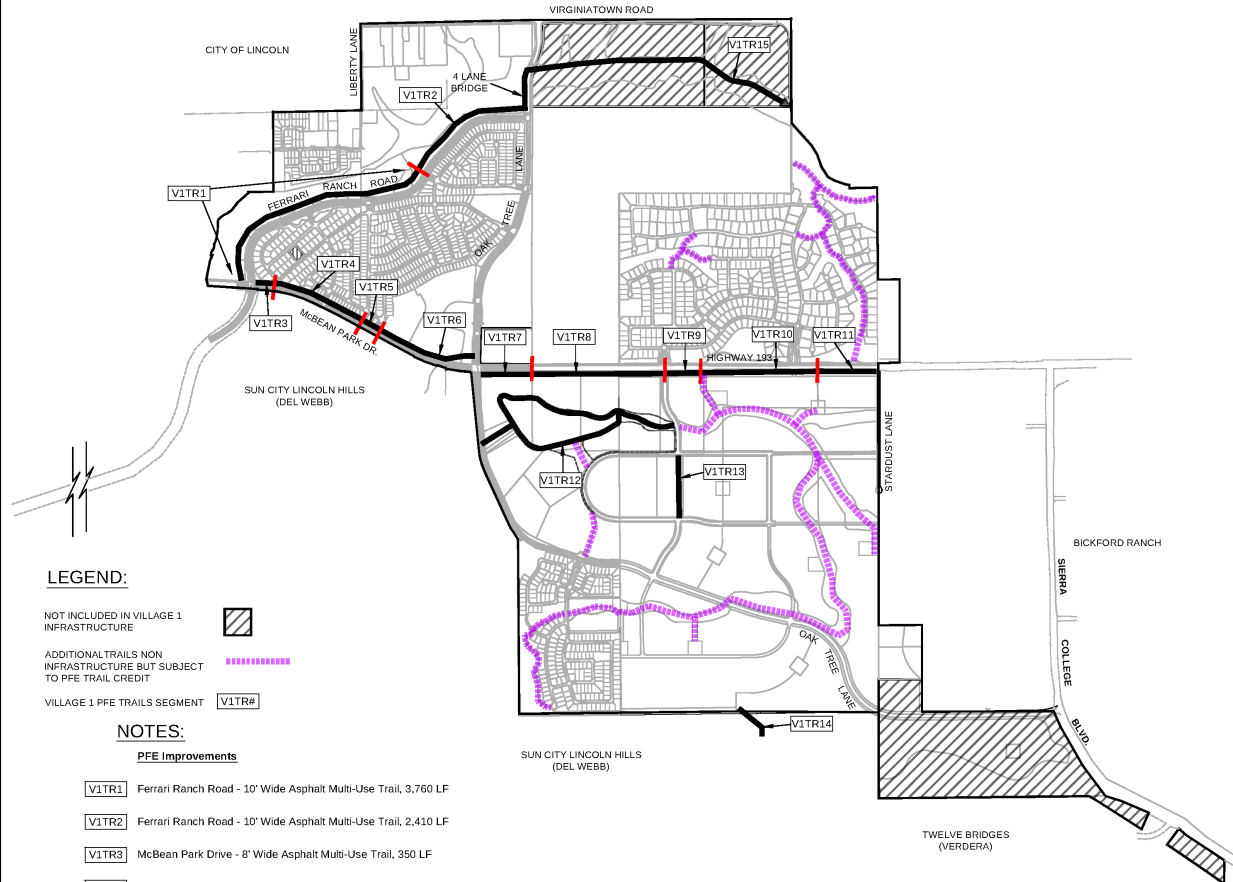
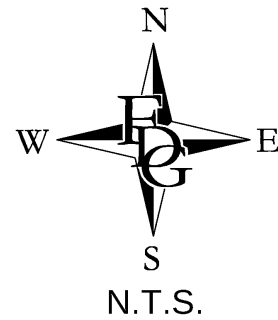
Disclaimer:  
This Exhibit is based on Specific Plan and Conceptual Design. Finals Costs will be based on Final Improvement Plans.



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Revised 8/9/2016

## Appendix 10.5: PFE Improvements Map - Frontage Landscaping



#### LEGEND:

NOT INCLUDED IN VILLAGE 1  
INFRASTRUCTURE



ADDITIONAL TRAILS NON  
INFRASTRUCTURE BUT SUBJECT  
TO PFE TRAIL CREDIT



VILLAGE 1 PFE TRAILS SEGMENT V1TR#

#### NOTES:

##### PFE Improvements

- V1TR1 Ferrari Ranch Road - 10' Wide Asphalt Multi-Use Trail, 3,760 LF
- V1TR2 Ferrari Ranch Road - 10' Wide Asphalt Multi-Use Trail, 2,410 LF
- V1TR3 McBean Park Drive - 8' Wide Asphalt Multi-Use Trail, 350 LF
- V1TR4 McBean Park Drive - 8' Wide Asphalt Multi-Use Trail, 1,420 LF
- V1TR5 Ferrari Ranch Road - 10' Wide Asphalt Multi-Use Trail, 300 LF
- V1TR6 McBean Park Drive - 8' Wide Asphalt Multi-Use Trail, 1,600 LF
- V1TR7 State Route 193 - 8' Wide Asphalt Multi-Use Trail, 760 LF
- V1TR8 State Route 193 - 8' Wide Asphalt Multi-Use Trail, 1,940 LF
- V1TR9 State Route 193 - 8' Wide Asphalt Multi-Use Trail, 590 LF
- V1TR10 State Route 193 - 8' Wide Asphalt Multi-Use Trail, 1,740 LF
- V1TR11 State Route 193 - 8' Wide Asphalt Multi-Use Trail, 1,000 LF
- V1TR12 Around Existing Lake - 10' Wide Asphalt Multi-Use Trail, 5,885 LF
- V1TR13 Connection North/South Collectors - 10' Wide Asphalt Multi-Use Trail, 960 LF
- V1TR14 Connection to Existing Trail System - 10' Wide Asphalt Multi-Use Trail, 600 LF
- V1TR15 Across Open Space - 8' Wide Asphalt Multi-Use Trail, 3,780 LF

Note: V1TR15 To Be Built Part Of Village 1 Finance, Even  
Though Properties Are Not Participating

Disclaimer:  
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**FRAYJI**  
DESIGN GROUP, INC.

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**CITY OF LINCOLN**  
**Residential PFE Fees per EDU**  
**SOUTH - Very Low Density**  
**Effective July 1, 2014**

PFE FEE DESCRIPTION	Non-Critical	Critical	Admin. Fee	TOTAL FEE
<b>Sewer Connection</b>	\$ 7,983.80	\$ -	\$ 199.60	\$ 8,183.40
<b>Water Connection</b>				
Storage	\$ 7,296.77	\$ -	\$ 181.74	\$ 7,478.51
Groundwater & Transmission	\$ 6,130.72	\$ 74.59	\$ 154.42	\$ 6,359.73
	\$ 13,427.49	\$ 74.59	\$ 336.16	\$ 13,838.24
<b>Transportation</b>	\$ 2,945.42	\$ 601.06	\$ 89.29	\$ 3,635.77
<b>Drainage</b>				
South	\$ 327.86	\$ 1,016.78	\$ 33.62	\$ 1,378.26
<b>Community Services Fee</b>				
Park Construction Fee	\$ 4,080.14	\$ -	\$ 101.90	\$ 4,182.04
Police	\$ 1,070.46	\$ -	\$ 26.26	\$ 1,096.72
Fire	\$ 543.11	\$ -	\$ 13.66	\$ 556.77
City Administration	\$ 947.55	\$ -	\$ 23.11	\$ 970.66
Library	\$ -	\$ -	\$ -	\$ -
Solid Waste	\$ 781.57	\$ -	\$ 19.96	\$ 801.53
	\$ 7,422.83	\$ -	\$ 184.89	\$ 7,607.72
<b>TOTALS</b>	<b>\$ 32,107.40</b>	<b>\$ 1,692.43</b>	<b>\$ 843.56</b>	<b>\$ 34,643.39</b>

**CITY OF LINCOLN**  
**Residential PFE Fees per EDU**  
**SOUTH - Low Density**  
**Effective July 1, 2014**

PFE FEE DESCRIPTION	Non-Critical	Critical	Admin. Fee	TOTAL FEE
<b>Sewer Connection</b>	\$ 6,286.19	\$ -	\$ 157.58	\$ 6,443.77
<b>Water Connection</b>				
Storage	\$ 3,079.02	\$ -	\$ 76.69	\$ 3,155.71
Groundwater & Transmission	\$ 2,586.43	\$ 31.42	\$ 65.13	\$ 2,682.98
	\$ 5,665.45	\$ 31.42	\$ 141.82	\$ 5,838.69
<b>Transportation</b>	\$ 2,945.42	\$ 601.06	\$ 89.29	\$ 3,635.77
<b>Drainage</b>				
South	\$ 252.04	\$ 781.66	\$ 26.26	\$ 1,059.96
<b>Community Services Fee</b>				
Park Construction Fee	\$ 4,080.14	\$ -	\$ 101.90	\$ 4,182.04
Police	\$ 1,070.46	\$ -	\$ 26.26	\$ 1,096.72
Fire	\$ 543.11	\$ -	\$ 13.66	\$ 556.77
City Administration	\$ 947.55	\$ -	\$ 23.11	\$ 970.66
Library	\$ -	\$ -	\$ -	\$ -
Solid Waste	\$ 781.57	\$ -	\$ 19.96	\$ 801.53
	\$ 7,422.83	\$ -	\$ 184.89	\$ 7,607.72
<b>TOTALS</b>	<b>\$ 22,571.93</b>	<b>\$ 1,414.14</b>	<b>\$ 599.84</b>	<b>\$ 24,585.91</b>

**CITY OF LINCOLN**  
**Residential PFE Fees per EDU**  
**SOUTH - Medium Density**  
**Effective July 1, 2014**

PFE FEE DESCRIPTION	Non-Critical	Critical	Admin. Fee	TOTAL FEE
<b>Sewer Connection</b>	\$ 6,286.19	\$ -	\$ 157.58	\$ 6,443.77
<b>Water Connection</b>				
Storage	\$ 3,079.02	\$ -	\$ 76.69	\$ 3,155.71
Groundwater & Transmission	\$ 2,586.43	\$ 31.42	\$ 65.13	\$ 2,682.98
	\$ 5,665.45	\$ 31.42	\$ 141.82	\$ 5,838.69
<b>Transportation</b>	\$ 2,120.96	\$ 432.81	\$ 64.08	\$ 2,617.85
<b>Drainage</b>				
North	\$ 176.48	\$ 547.31	\$ 17.86	\$ 741.65
<b>Community Services Fee</b>				
Park Construction Fee	\$ 4,080.14	\$ -	\$ 101.90	\$ 4,182.04
Police	\$ 1,070.46	\$ -	\$ 26.26	\$ 1,096.72
Fire	\$ 543.11	\$ -	\$ 13.66	\$ 556.77
City Administration	\$ 947.55	\$ -	\$ 23.11	\$ 970.66
Library	\$ -	\$ -	\$ -	\$ -
Solid Waste	\$ 781.57	\$ -	\$ 19.96	\$ 801.53
	\$ 7,422.83	\$ -	\$ 184.89	\$ 7,607.72
<b>TOTALS</b>	<b>\$ 21,671.91</b>	<b>\$ 1,011.54</b>	<b>\$ 566.23</b>	<b>\$ 23,249.68</b>

**CITY OF LINCOLN**  
**Residential PFE Fees per EDU**  
**SOUTH - High Density**  
**Effective July 1, 2014**

PFE FEE DESCRIPTION	Non-Critical	Critical	Admin. Fee	TOTAL FEE
<b>Sewer Connection</b>	\$ 5,028.74	\$ -	\$ 125.01	\$ 5,153.75
<b>Water Connection</b>				
Storage	\$ 1,661.89	\$ -	\$ 42.02	\$ 1,703.91
Groundwater & Transmission	\$ 1,397.01	\$ 16.97	\$ 34.67	\$ 1,448.65
	\$ 3,058.90	\$ 16.97	\$ 76.69	\$ 3,152.56
<b>Transportation</b>	\$ 2,120.96	\$ 432.81	\$ 64.08	\$ 2,617.85
<b>Drainage</b>				
North	\$ 60.42	\$ 187.49	\$ 6.30	\$ 254.21
<b>Community Services Fee</b>				
Park Construction Fee	\$ 2,937.20	\$ -	\$ 73.54	\$ 3,010.74
Police	\$ 771.07	\$ -	\$ 18.91	\$ 789.98
Fire	\$ 391.84	\$ -	\$ 9.45	\$ 401.29
City Administration	\$ 681.77	\$ -	\$ 16.81	\$ 698.58
Library	\$ -	\$ -	\$ -	\$ -
Solid Waste	\$ 562.02	\$ -	\$ 14.71	\$ 576.73
	\$ 5,343.90	\$ -	\$ 133.42	\$ 5,477.32
<b>TOTALS</b>	<b>\$ 15,612.92</b>	<b>\$ 637.27</b>	<b>\$ 405.50</b>	<b>\$ 16,655.69</b>

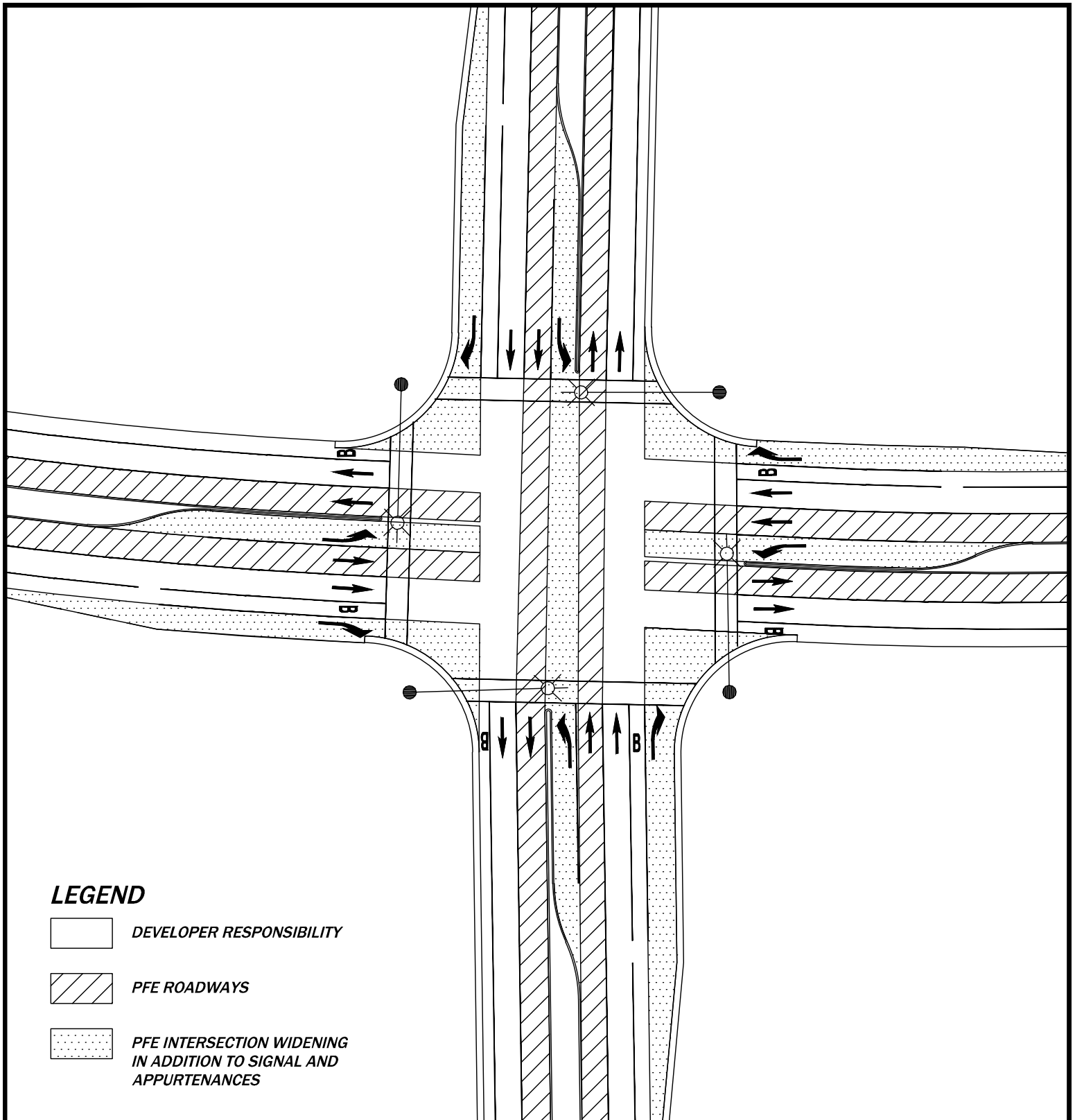
**APPENDIX 11**

**Lincoln Village 1 Specific Plan**




**Infrastructure Finance Plan**

**Typical Signalized/ Intersection**

**Widening PFE Eligible Diagram**



# **LEGEND**

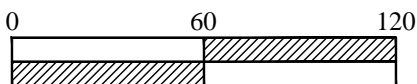
-  DEVELOPER RESPONSIBILITY
-  PFE ROADWAYS
-  PFE INTERSECTION WIDENING IN ADDITION TO SIGNAL AND APPURTENANCES



## **TYPICAL SIGNALIZED/INTERSECTION WIDENING PFE ELIGIBLE**

City of Lincoln, CA

August 9, 2016



**FRAY JI**  
DESIGN GROUP, INC.

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Roseville, CA 95661 (916) 782-3955 Fax

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**APPENDIX 12**

**Lincoln Village 1 Specific Plan**

**Infrastructure Finance Plan**

**Cost Summaries per Phase**

**(Phase 1 thru 8)**

Engineer's Opinion of Costs						
Village 1: Phase 1 & 2 Combine - Infrastructure Costs						
(Costs per Land Use Based on PFE Weighted Factor)						
Description	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	204	916	0	0	0	1120
Acres	102	229.1	0	0	0	331.1
Infrastructure Costs per Land Use for Phase 1 + Phase 2						
Water	\$ 1,161,500	\$ 2,200,500	\$ -	\$ -	\$ -	\$ 3,362,000
Amenities	\$ 523,100	\$ 991,000	\$ -	\$ -	\$ -	\$ 1,514,100
Roadway	\$ 3,057,100	\$ 13,726,800	\$ -	\$ -	\$ -	\$ 16,783,900
Wastewater	\$ 472,500	\$ 1,670,400	\$ -	\$ -	\$ -	\$ 2,142,900
Drainage	\$ 1,294,200	\$ 4,470,100	\$ -	\$ -	\$ -	\$ 5,764,300
Trails, Landscaping and Parks	\$ 137,300	\$ 616,300	\$ -	\$ -	\$ -	\$ 753,600
Subtotal for Phase 1 & 2	\$ 6,645,700	\$ 23,675,100	\$ -	\$ -	\$ -	\$ 30,320,800
Infrastructure Costs Per Land Use (Based on Developable Acres)						
Water	\$ 11,387	\$ 9,605	\$ -	\$ -	\$ -	
Amenities	\$ 5,128	\$ 4,326	\$ -	\$ -	\$ -	
Roadway	\$ 29,972	\$ 59,916	\$ -	\$ -	\$ -	
Wastewater	\$ 4,632	\$ 7,291	\$ -	\$ -	\$ -	
Drainage	\$ 12,688	\$ 19,512	\$ -	\$ -	\$ -	
Trails, Landscaping and Parks	\$ 1,346	\$ 2,690	\$ -	\$ -	\$ -	
Subtotal per Developable Acres for Phase 1 & 2	\$ 65,154	\$ 103,340	\$ -	\$ -	\$ -	
Subtotal per Developable Acres for Village 1	\$ 49,421	\$ 78,602	\$ -	\$ -	\$ -	
Difference	\$ 15,733	\$ 24,737	\$ -	\$ -	\$ -	

Engineer's Opinion of Costs						
Village 1: Phase 1 & 2 Combine - Infrastructure Costs						
(Costs per Land Use Based on PFE Weighted Factor)						
Description	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	204	916	0	0	0	1120
Acres	102	229.1	0	0	0	331.1
PFE Infrastructure Costs per Land Use Phase 1 & 2						
Water	\$ 218,100	\$ 413,300	\$ -	\$ -	\$ -	\$ 631,400
Amenities	\$ 51,200	\$ 96,900	\$ -	\$ -	\$ -	\$ 148,100
Roadway	\$ 516,900	\$ 2,321,100	\$ -	\$ -	\$ -	\$ 2,838,000
Wastewater	\$ 122,800	\$ 434,000	\$ -	\$ -	\$ -	\$ 556,800
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal for Phase 1 & 2	\$ 909,000	\$ 3,265,300	\$ -	\$ -	\$ -	\$ 4,174,300
PFE Infrastructure Costs per Land Use (Based on Developable Acres)						
Water	\$ 2,138	\$ 1,804	\$ -	\$ -	\$ -	
Amenities	\$ 502	\$ 423	\$ -	\$ -	\$ -	
Roadway	\$ 5,068	\$ 10,131	\$ -	\$ -	\$ -	
Wastewater	\$ 1,204	\$ 1,894	\$ -	\$ -	\$ -	
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal for Phase 1 & 2	\$ 8,912	\$ 14,253	\$ -	\$ -	\$ -	

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18

Engineer's Opinion of Costs						
Village 1: Phase 1- Infrastructure Costs						
(Costs per Land Use Based on PFE Weighted Factor)						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	28	505	0	0	0	533
Acres	13.8	126.3	0	0	0	140.1
Infrastructure Costs per Land Use for Phase 1						
Water	\$ 287,479	\$ 2,187,721	\$ -	\$ -	\$ -	\$ 2,475,200
Amenities	\$ 136,063	\$ 1,035,437	\$ -	\$ -	\$ -	\$ 1,171,500
Roadway	\$ 716,989	\$ 12,931,411	\$ -	\$ -	\$ -	\$ 13,648,400
Wastewater	\$ 114,319	\$ 1,623,481	\$ -	\$ -	\$ -	\$ 1,737,800
Drainage	\$ 365,116	\$ 5,065,484	\$ -	\$ -	\$ -	\$ 5,430,600
Trails, Landscaping and Parks	\$ 14,825	\$ 267,375	\$ -	\$ -	\$ -	\$ 282,200
Subtotal for Phase 1	\$ 1,634,791	\$ 23,110,909	\$ -	\$ -	\$ -	\$ 24,745,700
Infrastructure Costs Per Land Use (Based on Developable Acres)						
Water	\$ 20,832	\$ 17,322	\$ -	\$ -	\$ -	
Amenities	\$ 9,860	\$ 8,198	\$ -	\$ -	\$ -	
Roadway	\$ 51,956	\$ 102,386	\$ -	\$ -	\$ -	
Wastewater	\$ 8,284	\$ 12,854	\$ -	\$ -	\$ -	
Drainage	\$ 26,458	\$ 40,107	\$ -	\$ -	\$ -	
Trails, Landscaping and Parks	\$ 1,074	\$ 2,117	\$ -	\$ -	\$ -	
Subtotal per Developable Area for Phase 1	\$ 118,463	\$ 182,984	\$ -	\$ -	\$ -	
Subtotal per Developable Area for Village 1	\$ 49,421	\$ 78,602	\$ -	\$ -	\$ -	
Difference	\$ 69,042	\$ 104,382	\$ -	\$ -	\$ -	

Engineer's Opinion of Costs						
Village 1: Phase 1- Infrastructure Costs						
(Costs per Land Use Based on PFE Weighted Factor)						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	28	505	0	0	0	533
Acres	13.8	126.3	0	0	0	140.1
PFE Infrastructure Costs per Land Use for Phase 1						
Water	\$ 54,367	\$ 413,733	\$ -	\$ -	\$ -	\$ 468,100
Amenities	\$ 17,201	\$ 130,899	\$ -	\$ -	\$ -	\$ 148,100
Roadway	\$ 149,088	\$ 2,688,912	\$ -	\$ -	\$ -	\$ 2,838,000
Wastewater	\$ 23,814	\$ 338,186	\$ -	\$ -	\$ -	\$ 362,000
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal for Phase 1	\$ 244,470	\$ 3,571,730	\$ -	\$ -	\$ -	\$ 3,816,200
PFE Infrastructure Costs per Land Use (Based on Developable Acres)						
Water	\$ 3,940	\$ 3,276	\$ -	\$ -	\$ -	
Amenities	\$ 1,246	\$ 1,036	\$ -	\$ -	\$ -	
Roadway	\$ 10,803	\$ 21,290	\$ -	\$ -	\$ -	
Wastewater	\$ 1,726	\$ 2,678	\$ -	\$ -	\$ -	
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal for Phase 1	\$ 17,715	\$ 28,280	\$ -	\$ -	\$ -	

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18

Engineer's Opinion of Costs						
Village 1: Phase 2 - Infrastructure Costs						
(Costs per Land Use Based on PFE Weighted Factor)						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	176	411	0	0	0	587
Acres	88.2	102.8	0	0	0	191
Infrastructure Costs per Land Use for Phase 2						
Water	\$ 446,677	\$ 440,123	\$ -	\$ -	\$ -	\$ 886,800
Amenities	\$ 172,566	\$ 170,034	\$ -	\$ -	\$ -	\$ 342,600
Roadway	\$ 940,116	\$ 2,195,384	\$ -	\$ -	\$ -	\$ 3,135,500
Wastewater	\$ 142,703	\$ 262,397	\$ -	\$ -	\$ -	\$ 405,100
Drainage	\$ 119,335	\$ 214,365	\$ -	\$ -	\$ -	\$ 333,700
Trails, Landscaping and Parks	\$ 141,340	\$ 330,060	\$ -	\$ -	\$ -	\$ 471,400
Subtotal for Phase 2	\$ 1,962,736	\$ 3,612,364	\$ -	\$ -	\$ -	\$ 5,575,100
Infrastructure Costs Per Land Use (Based on Developable Acres)						
Water	\$ 5,064	\$ 4,281	\$ -	\$ -	\$ -	
Amenities	\$ 1,957	\$ 1,654	\$ -	\$ -	\$ -	
Roadway	\$ 10,659	\$ 21,356	\$ -	\$ -	\$ -	
Wastewater	\$ 1,618	\$ 2,552	\$ -	\$ -	\$ -	
Drainage	\$ 1,353	\$ 2,085	\$ -	\$ -	\$ -	
Trails, Landscaping and Parks	\$ 1,602	\$ 3,211	\$ -	\$ -	\$ -	
Subtotal per Developable Area for Phase 2	\$ 22,253	\$ 35,140	\$ -	\$ -	\$ -	
Subtotal per Developable Area for Village 1	\$ 49,421	\$ 78,602	\$ -	\$ -	\$ -	
Difference	\$ (27,168)	\$ (43,463)	\$ -	\$ -	\$ -	

<b>Engineer's Opinion of Costs</b>						
<b>Village 1: Phase 2 - Infrastructure Costs</b>						
<b>(Costs per Land Use Based on PFE Weighted Factor)</b>						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	176	411	0	0	0	587
Acres	88.2	102.8	0	0	0	191
<b>PFE Infrastructure Costs per Land Use for Phase 2</b>						
Water	\$ 82,253	\$ 81,047	\$ -	\$ -	\$ -	\$ 163,300
Amenities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater	\$ 68,621	\$ 126,179	\$ -	\$ -	\$ -	\$ 194,800
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal for Phase 2	\$ 150,875	\$ 207,225	\$ -	\$ -	\$ -	\$ 358,100
<b>PFE Infrastructure Costs per Land Use (Based on Developable Acres)</b>						
Water	\$ 933	\$ 788	\$ -	\$ -	\$ -	
Amenities	\$ -	\$ -	\$ -	\$ -	\$ -	
Roadway	\$ -	\$ -	\$ -	\$ -	\$ -	
Wastewater	\$ 778	\$ 1,227	\$ -	\$ -	\$ -	
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal for Phase 2	\$ 1,711	\$ 2,016	\$ -	\$ -	\$ -	

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18

Engineer's Opinion of Costs						
Village 1: Phase 3 - Infrastructure Costs						
(Costs per Land Use Based on PFE Weighted Factor)						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	0	562	136	0	196	894
Acres	0	140.3	17	0	10.9	168.2
Infrastructure Costs per Land Use for Phase 3						
Water	\$ -	\$ 972,929	\$ 235,442	\$ -	\$ 183,229	\$ 1,391,600
Amenities	\$ -	\$ 2,153,574	\$ 521,149	\$ -	\$ 405,577	\$ 3,080,300
Roadway	\$ -	\$ 5,920,841	\$ 1,031,617	\$ -	\$ 1,486,742	\$ 8,439,200
Wastewater	\$ -	\$ 118,541	\$ 28,686	\$ -	\$ 33,073	\$ 180,300
Drainage	\$ -	\$ 1,219,619	\$ 206,597	\$ -	\$ 102,083	\$ 1,528,300
Trails, Landscaping and Parks	\$ -	\$ 252,763	\$ 61,167	\$ -	\$ 63,470	\$ 377,400
Subtotal for Phase 3	\$ -	\$ 10,638,267	\$ 2,084,659	\$ -	\$ 2,274,175	\$ 14,997,100
Infrastructure Costs Per Land Use (Based on Developable Acres)						
Water	\$ -	\$ 6,935	\$ 13,850	\$ -	\$ 16,810	
Amenities	\$ -	\$ 15,350	\$ 30,656	\$ -	\$ 37,209	
Roadway	\$ -	\$ 42,201	\$ 60,683	\$ -	\$ 136,398	
Wastewater	\$ -	\$ 845	\$ 1,687	\$ -	\$ 3,034	
Drainage	\$ -	\$ 8,693	\$ 12,153	\$ -	\$ 9,365	
Trails, Landscaping and Parks	\$ -	\$ 1,802	\$ 3,598	\$ -	\$ 5,823	
Subtotal per Developable Area for Phase 3	\$ -	\$ 75,825	\$ 122,627	\$ -	\$ 208,640	
Subtotal per Developable Area for Village 1	\$ -	\$ 78,602	\$ 122,573	\$ -	\$ 222,426	
Difference	\$ -	\$ (2,777)	\$ 54	\$ -	\$ (13,786)	



<b>Engineer's Opinion of Costs</b>						
<b>Village 1: Phase 3 - Infrastructure Costs</b>						
<b>(Costs per Land Use Based on PFE Weighted Factor)</b>						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	0	562	136	0	196	894
Acres	0	140.3	17	0	10.9	168.2
<b>PFE Infrastructure Costs per Land Use for Phase 3</b>						
Water	\$ -	\$ 420,186	\$ 101,682	\$ -	\$ 79,132	\$ 601,000
Amenities	\$ -	\$ 207,716	\$ 50,266	\$ -	\$ 39,119	\$ 297,100
Roadway	\$ -	\$ 4,603,329	\$ 802,060	\$ -	\$ 1,155,911	\$ 6,561,300
Wastewater	\$ -	\$ 285,865	\$ 69,177	\$ -	\$ 79,757	\$ 434,800
Drainage	\$ -	\$ 94,805	\$ 16,060	\$ -	\$ 7,935	\$ 118,800
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal for Phase 3	\$ -	\$ 5,611,901	\$ 1,039,245	\$ -	\$ 1,361,854	\$ 8,013,000
<b>PFE Infrastructure Costs per Land Use (Based on Developable Acres)</b>						
Water	\$ -	\$ 2,995	\$ 5,981	\$ -	\$ 7,260	
Amenities	\$ -	\$ 1,481	\$ 2,957	\$ -	\$ 3,589	
Roadway	\$ -	\$ 32,811	\$ 47,180	\$ -	\$ 106,047	
Wastewater	\$ -	\$ 2,038	\$ 4,069	\$ -	\$ 7,317	
Drainage	\$ -	\$ 676	\$ 945	\$ -	\$ 728	
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal for Phase 3	\$ -	\$ 39,999	\$ 61,132	\$ -	\$ 124,941	

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18

**Engineer's Opinion of Costs**
**Village 1: Phase 4 - Infrastructure Costs**
**(Costs per Land Use Based on PFE Weighted Factor)**

	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	114	29	187	157	184	671
Acres	57	7.3	23.4	8.7	10.2	106.6
<b>Infrastructure Costs per Land Use for Phase 4</b>						
Water	\$ 412,977	\$ 44,327	\$ 285,834	\$ 129,588	\$ 151,874	\$ 1,024,600
Amenities	\$ 157,476	\$ 16,903	\$ 108,994	\$ 49,415	\$ 57,913	\$ 390,700
Roadway	\$ 1,331,736	\$ 338,775	\$ 1,572,850	\$ 1,320,521	\$ 1,547,617	\$ 6,111,500
Wastewater	\$ 221,336	\$ 44,334	\$ 285,881	\$ 192,014	\$ 225,035	\$ 968,600
Drainage	\$ 316,019	\$ 61,839	\$ 279,128	\$ 80,348	\$ 94,166	\$ 831,500
Trails, Landscaping and Parks	\$ 14,698	\$ 3,739	\$ 24,109	\$ 14,574	\$ 17,080	\$ 74,200
Subtotal for Phase 4	\$ 2,454,241	\$ 509,917	\$ 2,556,797	\$ 1,786,460	\$ 2,093,686	\$ 9,401,100
<b>Infrastructure Costs Per Land Use (Based on Developable Acres)</b>						
Water	\$ 7,245	\$ 6,072	\$ 12,215	\$ 14,895	\$ 14,890	
Amenities	\$ 2,763	\$ 2,315	\$ 4,658	\$ 5,680	\$ 5,678	
Roadway	\$ 23,364	\$ 46,408	\$ 67,216	\$ 151,784	\$ 151,727	
Wastewater	\$ 3,883	\$ 6,073	\$ 12,217	\$ 22,071	\$ 22,062	
Drainage	\$ 5,544	\$ 8,471	\$ 11,929	\$ 9,235	\$ 9,232	
Trails, Landscaping and Parks	\$ 258	\$ 512	\$ 1,030	\$ 1,675	\$ 1,675	
Subtotal per Developable Area for Phase 4	\$ 43,057	\$ 69,852	\$ 109,265	\$ 205,340	\$ 205,263	
Subtotal per Developable Area for Village 1	\$ 49,421	\$ 78,602	\$ 122,573	\$ 222,677	\$ 222,426	
Difference	\$ (6,364)	\$ (8,751)	\$ (13,308)	\$ (17,337)	\$ (17,162)	

<b>Engineer's Opinion of Costs</b>						
<b>Village 1: Phase 4 - Infrastructure Costs</b>						
<b>(Costs per Land Use Based on PFE Weighted Factor)</b>						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	114	29	187	157	184	671
Acres	57	7.3	23.4	8.7	10.2	106.6
<b>PFE Infrastructure Costs per Land Use for Phase 4</b>						
Water	\$ 110,076	\$ 11,815	\$ 76,187	\$ 34,541	\$ 40,481	\$ 273,100
Amenities	\$ 307,536	\$ 33,010	\$ 212,855	\$ 96,502	\$ 113,098	\$ 763,000
Roadway	\$ 274,867	\$ 69,922	\$ 324,633	\$ 272,553	\$ 319,425	\$ 1,261,400
Wastewater	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Drainage	\$ 501,677	\$ 98,169	\$ 443,114	\$ 127,552	\$ 149,488	\$ 1,320,000
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal for Phase 4	\$ 1,194,156	\$ 212,916	\$ 1,056,789	\$ 531,147	\$ 622,491	\$ 3,617,500
<b>PFE Infrastructure Costs per Land Use (Based on Developable Acres)</b>						
Water	\$ 1,931	\$ 1,619	\$ 3,256	\$ 3,970	\$ 3,969	
Amenities	\$ 5,395	\$ 4,522	\$ 9,096	\$ 11,092	\$ 11,088	
Roadway	\$ 4,822	\$ 9,578	\$ 13,873	\$ 31,328	\$ 31,316	
Wastewater	\$ -	\$ -	\$ -	\$ -	\$ -	
Drainage	\$ 8,801	\$ 13,448	\$ 18,937	\$ 14,661	\$ 14,656	
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal for Phase 4	\$ 20,950	\$ 29,167	\$ 45,162	\$ 61,051	\$ 61,029	

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18

Engineer's Opinion of Costs						
Village 1: Phase 5 - Infrastructure Costs						
(Costs per Land Use Based on PFE Weighted Factor)						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	40	128	229	362	158	917
Acres	19.8	32.1	28.6	20.1	8.8	109.4
Infrastructure Costs per Land Use for Phase 5						
Water	\$ 68,583	\$ 92,602	\$ 165,670	\$ 141,420	\$ 61,725	\$ 530,000
Amenities	\$ 72,853	\$ 98,367	\$ 175,986	\$ 150,226	\$ 65,568	\$ 563,000
Roadway	\$ 357,703	\$ 1,144,649	\$ 1,474,451	\$ 2,330,791	\$ 1,017,307	\$ 6,324,900
Wastewater	\$ 15,040	\$ 37,897	\$ 67,799	\$ 85,741	\$ 37,423	\$ 243,900
Drainage	\$ 113,973	\$ 280,549	\$ 351,343	\$ 190,422	\$ 83,113	\$ 1,019,400
Trails, Landscaping and Parks	\$ 41,509	\$ 132,829	\$ 237,639	\$ 270,472	\$ 118,051	\$ 800,500
Subtotal for Phase 5	\$ 669,661	\$ 1,786,892	\$ 2,472,888	\$ 3,169,073	\$ 1,383,186	\$ 9,481,700
Infrastructure Costs Per Land Use (Based on Developable Acres)						
Water	\$ 3,464	\$ 2,885	\$ 5,793	\$ 7,036	\$ 7,014	
Amenities	\$ 3,679	\$ 3,064	\$ 6,153	\$ 7,474	\$ 7,451	
Roadway	\$ 18,066	\$ 35,659	\$ 51,554	\$ 115,960	\$ 115,603	
Wastewater	\$ 760	\$ 1,181	\$ 2,371	\$ 4,266	\$ 4,253	
Drainage	\$ 5,756	\$ 8,740	\$ 12,285	\$ 9,474	\$ 9,445	
Trails, Landscaping and Parks	\$ 2,096	\$ 4,138	\$ 8,309	\$ 13,456	\$ 13,415	
Subtotal per Developable Area for Phase 5	\$ 33,821	\$ 55,666	\$ 86,465	\$ 157,665	\$ 157,180	
Subtotal per Developable Area for Village 1	\$ 49,421	\$ 78,602	\$ 122,573	\$ 222,677	\$ 222,426	
Difference	\$ (15,600)	\$ (22,936)	\$ (36,108)	\$ (65,012)	\$ (65,245)	

<b>Engineer's Opinion of Costs</b>						
<b>Village 1: Phase 5 - Infrastructure Costs</b>						
<b>(Costs per Land Use Based on PFE Weighted Factor)</b>						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	40	128	229	362	158	917
Acres	19.8	32.1	28.6	20.1	8.8	109.4
<b>PFE Infrastructure Costs per Land Use for Phase 5</b>						
Water	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amenities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway	\$ 145,973	\$ 467,115	\$ 601,702	\$ 951,162	\$ 415,148	\$ 2,581,100
Wastewater	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal for Phase 5	\$ 145,973	\$ 467,115	\$ 601,702	\$ 951,162	\$ 415,148	\$ 2,581,100
<b>PFE Infrastructure Costs per Land Use (Based on Developable Acres)</b>						
Water	\$ -	\$ -	\$ -	\$ -	\$ -	
Amenities	\$ -	\$ -	\$ -	\$ -	\$ -	
Roadway	\$ 7,372	\$ 14,552	\$ 21,039	\$ 47,321	\$ 47,176	
Wastewater	\$ -	\$ -	\$ -	\$ -	\$ -	
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal for Phase 5	\$ 7,372	\$ 14,552	\$ 21,039	\$ 47,321	\$ 47,176	

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18

Engineer's Opinion of Costs						
Village 1: Phase 6 - Infrastructure Costs						
(Costs per Land Use Based on PFE Weighted Factor)						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	18	455	105	0	164	742
Acres	9.1	113.7	13.1	0	9.1	145
Infrastructure Costs per Land Use for Phase 6						
Water	\$ 28,958	\$ 308,854	\$ 71,274	\$ -	\$ 60,115	\$ 469,200
Amenities	\$ 10,146	\$ 108,217	\$ 24,973	\$ -	\$ 21,063	\$ 164,400
Roadway	\$ 72,942	\$ 1,843,805	\$ 306,355	\$ -	\$ 478,498	\$ 2,701,600
Wastewater	\$ 9,431	\$ 187,720	\$ 43,320	\$ -	\$ 54,129	\$ 294,600
Drainage	\$ 18,308	\$ 355,991	\$ 57,506	\$ -	\$ 30,795	\$ 462,600
Trails, Landscaping and Parks	\$ 5,332	\$ 134,785	\$ 31,104	\$ -	\$ 34,979	\$ 206,200
Subtotal for Phase 6	\$ 145,117	\$ 2,939,371	\$ 534,533	\$ -	\$ 679,579	\$ 4,298,600
Infrastructure Costs Per Land Use (Based on Developable Acres)						
Water	\$ 3,182	\$ 2,716	\$ 5,441	\$ -	\$ 6,606	
Amenities	\$ 1,115	\$ 952	\$ 1,906	\$ -	\$ 2,315	
Roadway	\$ 8,016	\$ 16,216	\$ 23,386	\$ -	\$ 52,582	
Wastewater	\$ 1,036	\$ 1,651	\$ 3,307	\$ -	\$ 5,948	
Drainage	\$ 2,012	\$ 3,131	\$ 4,390	\$ -	\$ 3,384	
Trails, Landscaping and Parks	\$ 586	\$ 1,185	\$ 2,374	\$ -	\$ 3,844	
Subtotal per Developable Area for Phase 6	\$ 15,947	\$ 25,852	\$ 40,804	\$ -	\$ 74,679	
Subtotal per Developable Area for Village 1	\$ 49,421	\$ 78,602	\$ 122,573	\$ -	\$ 222,426	
Difference	\$ (33,474)	\$ (52,750)	\$ (81,768)	\$ -	\$ (147,747)	

Engineer's Opinion of Costs						
Village 1: Phase 6 - Infrastructure Costs						
(Costs per Land Use Based on PFE Weighted Factor)						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	18	455	105	0	164	742
Acres	9.1	113.7	13.1	0	9.1	145
PFE Infrastructure Costs per Land Use for Phase 6						
Water	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amenities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal for Phase 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PFE Infrastructure Costs per Land Use (Based on Developable Acres)						
Water	\$ -	\$ -	\$ -	\$ -	\$ -	
Amenities	\$ -	\$ -	\$ -	\$ -	\$ -	
Roadway	\$ -	\$ -	\$ -	\$ -	\$ -	
Wastewater	\$ -	\$ -	\$ -	\$ -	\$ -	
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal for Phase 6	\$ -	\$ -	\$ -	\$ -	\$ -	

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18

Engineer's Opinion of Costs						
Village 1: Phase 7 - Infrastructure Costs						
(Costs per Land Use Based on PFE Weighted Factor)						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	93	0	0	0	0	93
Acres	46.3	0.0	0	0	0	46.3
Infrastructure Costs per Land Use for Phase 6						
Water	\$ 570,000	\$ -	\$ -	\$ -	\$ -	\$ 570,000
Amenities	\$ 184,600	\$ -	\$ -	\$ -	\$ -	\$ 184,600
Roadway	\$ 9,026,300	\$ -	\$ -	\$ -	\$ -	\$ 9,026,300
Wastewater	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Drainage	\$ 185,000	\$ -	\$ -	\$ -	\$ -	\$ 185,000
Trails, Landscaping and Parks	\$ 177,600	\$ -	\$ -	\$ -	\$ -	\$ 177,600
Subtotal for Phase 7	\$ 10,143,500	\$ -	\$ -	\$ -	\$ -	\$ 10,143,500
Infrastructure Costs Per Land Use (Based on Developable Acres)						
Water	\$ 12,311	\$ -	\$ -	\$ -	\$ -	
Amenities	\$ 3,987	\$ -	\$ -	\$ -	\$ -	
Roadway	\$ 194,952	\$ -	\$ -	\$ -	\$ -	
Wastewater	\$ -	\$ -	\$ -	\$ -	\$ -	
Drainage	\$ 3,996	\$ -	\$ -	\$ -	\$ -	
Trails, Landscaping and Parks	\$ 3,836	\$ -	\$ -	\$ -	\$ -	
Subtotal per Developable Area for Phase 7	\$ 219,082	\$ -	\$ -	\$ -	\$ -	
Subtotal per Developable Area for Village 1	\$ 49,421	\$ -	\$ -	\$ -	\$ -	
Difference	\$ 169,661	\$ -	\$ -	\$ -	\$ -	



<b>Engineer's Opinion of Costs</b>						
<b>Village 1: Phase 7 - Infrastructure Costs</b>						
<b>(Costs per Land Use Based on PFE Weighted Factor)</b>						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	93	0	0	0	0	93
Acres	46.3	0.0	0	0	0	46.3
<b>PFE Infrastructure Costs per Land Use for Phase 7</b>						
Water	\$ 230,400	\$ -	\$ -	\$ -	\$ -	\$ 230,400
Amenities	\$ 29,300	\$ -	\$ -	\$ -	\$ -	\$ 29,300
Roadway	\$ 8,981,400	\$ -	\$ -	\$ -	\$ -	\$ 8,981,400
Wastewater	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal for Phase 7	\$ 9,241,100	\$ -	\$ -	\$ -	\$ -	\$ 9,241,100
<b>PFE Infrastructure Costs per Land Use (Based on Developable Acres)</b>						
Water	\$ 4,976	\$ -	\$ -	\$ -	\$ -	
Amenities	\$ 633	\$ -	\$ -	\$ -	\$ -	
Roadway	\$ 193,983	\$ -	\$ -	\$ -	\$ -	
Wastewater	\$ -	\$ -	\$ -	\$ -	\$ -	
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal for Phase 7	\$ 199,592	\$ -	\$ -	\$ -	\$ -	

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18

Engineer's Opinion of Costs						
Village 1: Phase 8 - Infrastructure Costs						
(Costs per Land Use Based on PFE Weighted Factor)						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	0	0	71	0	0	71
Acres	0	0.0	8.9	0	0	8.9
Infrastructure Costs per Land Use for Phase 8						
Water	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amenities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Trails, Landscaping and Parks	\$ -	\$ -	\$ 243,200	\$ -	\$ -	\$ 243,200
Subtotal for Phase 8	\$ -	\$ -	\$ 243,200	\$ -	\$ -	\$ 243,200
Infrastructure Costs Per Land Use (Based on Developable Acres)						
Water	\$ -	\$ -	\$ -	\$ -	\$ -	
Amenities	\$ -	\$ -	\$ -	\$ -	\$ -	
Roadway	\$ -	\$ -	\$ -	\$ -	\$ -	
Wastewater	\$ -	\$ -	\$ -	\$ -	\$ -	
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	
Trails, Landscaping and Parks	\$ -	\$ -	\$ 27,326	\$ -	\$ -	
Subtotal per Developable Area for Phase 8	\$ -	\$ -	\$ 27,326	\$ -	\$ -	
Subtotal per Developable Area for Village 1	\$ -	\$ -	\$ 122,573	\$ -	\$ -	
Difference	\$ -	\$ -	\$ (95,247)	\$ -	\$ -	

Engineer's Opinion of Costs						
Village 1: Phase 8 - Infrastructure Costs						
(Costs per Land Use Based on PFE Weighted Factor)						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Number of Units	0	0	71	0	0	71
Acres	0	0.0	8.9	0	0	8.9
PFE Infrastructure Costs per Land Use for Phase 8						
Water	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amenities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal for Phase 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PFE Infrastructure Costs per Land Use (Based on Developable Acres)						
Water	\$ -	\$ -	\$ -	\$ -	\$ -	
Amenities	\$ -	\$ -	\$ -	\$ -	\$ -	
Roadway	\$ -	\$ -	\$ -	\$ -	\$ -	
Wastewater	\$ -	\$ -	\$ -	\$ -	\$ -	
Drainage	\$ -	\$ -	\$ -	\$ -	\$ -	
Trails, Landscaping and Parks	\$ -	\$ -	\$ -	\$ -	\$ -	
Subtotal for Phase 8	\$ -	\$ -	\$ -	\$ -	\$ -	

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18

**Cost Summaries per Phase  
Consolidated  
(Phases 1 thru 8)**

<b>Engineer's Opinion of Costs</b>						
<b>Village 1: Overall Comparison with Phase 1 &amp; 2 - Consolidated</b>						
<b>(Costs per Land Use Based on PFE Weighted Factor)</b>						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Village 1 Number of Units	469	2090	728	519	702	4508
Phase 1 & 2 Number of Units	204	916	0	0	0	1120
Total Acres	102	229.1	0	0	0	331.1
Infrastructure Costs per Land Use	\$ 6,645,700	\$ 23,675,100	\$ -	\$ -	\$ -	\$ 30,320,800
(Owner Finance) Cost Per Acre	\$ 65,154	\$ 103,340	\$ -	\$ -	\$ -	
PFE Infrastructure Costs per Land Use	\$ 909,000	\$ 3,265,300	\$ -	\$ -	\$ -	\$ 4,174,300
(Owner Finance) Cost Per Acre	\$ 8,912	\$ 14,253	\$ -	\$ -	\$ -	
Total Financed Construction Costs	\$ 7,554,700	\$ 26,940,400	\$ -	\$ -	\$ -	\$ 34,495,100
(Owner Finance) Cost Per Acre	\$ 74,066	\$ 117,592	\$ -	\$ -	\$ -	
Total Costs for Overall Village 1	\$ 15,310,200	\$ 55,476,700	\$ 14,939,400	\$ 8,835,600	\$ 11,951,100	\$ 106,513,000
Village 1 Total Cost Per Acre	\$ 65,372	\$ 106,176	\$ 164,169	\$ 306,792	\$ 306,438	
PFE Credits from Collected Impact Fees	\$ (909,000)	\$ (3,265,300)	\$ -	\$ -	\$ -	\$ (4,174,300)
PFE Credit Per Acre	\$ (8,912)	\$ (14,253)	\$ -	\$ -	\$ -	
Additional Reimbursement from Village 1 Future Phases	\$ (1,604,757)	\$ (5,667,314)	\$ -	\$ -	\$ -	\$ (7,272,071)
Additional Reimbursement Per Acre	\$ (15,733)	\$ (24,737)	\$ -	\$ -	\$ -	
PFE Credits from Village 1 Collected Impact Fees	\$ (3,735,800)	\$ (14,407,000)	\$ (3,785,300)	\$ (2,422,500)	\$ (3,276,500)	\$ (27,627,100)
Village 1 PFE Credit Per Acre	\$ (15,951)	\$ (27,573)	\$ (41,597)	\$ (84,115)	\$ (84,013)	
Net Cost Phase 1 & 2	\$ 5,040,943	\$ 18,007,786	\$ -	\$ -	\$ -	\$ 23,048,729
Net Cost Per Acre	\$ 49,421	\$ 78,602	\$ -	\$ -	\$ -	
Net Cost for Village 1	\$ 11,574,400	\$ 41,069,700	\$ 11,154,100	\$ 6,413,100	\$ 8,674,600	\$ 78,885,900
Net Cost Per Acre	\$ 49,421	\$ 78,602	\$ 122,573	\$ 222,677	\$ 222,426	

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18  
Based on Projected Units

<b>Engineer's Opinion of Costs</b>						
<b>Village 1: Overall Comparison with Phase 1 - Consolidated</b>						
<b>(Costs per Land Use Based on PFE Weighted Factor)</b>						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Village 1 Number of Units	469	2090	728	519	702	4508
Phase 1 Number of Units	28	505	0	0	0	533
Total Acres	13.8	126.3	0	0	0	140.1
Infrastructure Costs per Land Use	\$ 1,634,791	\$ 23,110,909	\$ -	\$ -	\$ -	\$ 24,745,700
(Owner Finance) Cost Per Acre	\$ 118,463	\$ 182,984	\$ -	\$ -	\$ -	
PFE Infrastructure Costs per Land Use	\$ 244,470	\$ 3,571,730	\$ -	\$ -	\$ -	\$ 3,816,200
(Owner Finance) Cost Per Acre	\$ 17,715	\$ 28,280	\$ -	\$ -	\$ -	
Total Financed Construction Costs	\$ 1,879,261	\$ 26,682,639	\$ -	\$ -	\$ -	\$ 28,561,900
(Owner Finance) Cost Per Acre	\$ 136,178	\$ 211,264	\$ -	\$ -	\$ -	
Total Costs for Overall Village 1	\$ 15,310,200	\$ 55,476,700	\$ 14,939,400	\$ 8,835,600	\$ 11,951,100	\$ 106,513,000
Village 1 Total Cost Per Acre	\$ 65,372	\$ 106,176	\$ 164,169	\$ 306,792	\$ 306,438	
PFE Credits from Collected Impact Fees	\$ (244,470)	\$ (3,571,730)	\$ -	\$ -	\$ -	\$ (3,816,200)
PFE Credit Per Acre	\$ (17,715)	\$ (28,280)	\$ -	\$ -	\$ -	
Additional Reimbursement from Village 1 Future Phases	\$ (952,781)	\$ (13,183,439)	\$ -	\$ -	\$ -	\$ (14,136,220)
Additional Reimbursement Per Acre	\$ (69,042)	\$ (104,382)	\$ -	\$ -	\$ -	
PFE Credits from Village 1 Collected Impact Fees	\$ (3,735,800)	\$ (14,407,000)	\$ (3,785,300)	\$ (2,422,500)	\$ (3,276,500)	\$ (27,627,100)
Village 1 PFE Credit Per Acre	\$ (15,951)	\$ (27,573)	\$ (41,597)	\$ (84,115)	\$ (84,013)	
Net Cost for Phase 1	\$ 682,010	\$ 9,927,470	\$ -	\$ -	\$ -	\$ 10,609,480
Cost Per Acre	\$ 49,421	\$ 78,602	\$ -	\$ -	\$ -	
Net Cost for Village 1	\$ 11,574,400	\$ 41,069,700	\$ 11,154,100	\$ 6,413,100	\$ 8,674,600	\$ 78,885,900
Cost Per Acre	\$ 49,421	\$ 78,602	\$ 122,573	\$ 222,677	\$ 222,426	

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18  
Based on Projected Units

<b>Engineer's Opinion of Costs</b>						
<b>Village 1: Overall Comparison with Phase 2 - Consolidated</b>						
<b>(Costs per Land Use Based on PFE Weighted Factor)</b>						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Village 1 Number of Units	469	2090	728	519	702	4508
Phase 2 Number of Units	176	411	0	0	0	587
Total Acres	88.2	102.8	0	0	0	191
Infrastructure Costs per Land Use	\$ 1,962,736	\$ 3,612,364	\$ -	\$ -	\$ -	\$ 5,575,100
(Owner Finance) Cost Per Acre	\$ 22,253	\$ 35,140	\$ -	\$ -	\$ -	
PFE Infrastructure Costs per Land Use	\$ 150,875	\$ 207,225	\$ -	\$ -	\$ -	\$ 358,100
(Owner Finance) Cost Per Acre	\$ 1,711	\$ 2,016	\$ -	\$ -	\$ -	
Total Financed Construction Costs	\$ 2,113,611	\$ 3,819,589	\$ -	\$ -	\$ -	\$ 5,933,200
(Owner Finance) Cost Per Acre	\$ 23,964	\$ 37,156	\$ -	\$ -	\$ -	
Total Costs for Overall Village 1	\$ 15,310,200	\$ 55,476,700	\$ 14,939,400	\$ 8,835,600	\$ 11,951,100	\$ 106,513,000
Village 1 Total Cost Per Acre	\$ 65,372	\$ 106,176	\$ 164,169	\$ 306,792	\$ 306,438	
PFE Credits from Collected Impact Fees	\$ (150,875)	\$ (207,225)	\$ -	\$ -	\$ -	\$ (358,100)
PFE Credit Per Acre	\$ (1,711)	\$ (2,016)	\$ -	\$ -	\$ -	
Additional Reimbursement paid to Village 1	\$ 2,396,196	\$ 4,467,953	\$ -	\$ -	\$ -	\$ 6,864,149
Additional Reimbursement Per Acre	\$ 27,168	\$ 43,463	\$ -	\$ -	\$ -	
PFE Credits from Village 1 Collected Impact Fees	\$ (3,735,800)	\$ (14,407,000)	\$ (3,785,300)	\$ (2,422,500)	\$ (3,276,500)	\$ (27,627,100)
Village 1 PFE Credit Per Acre	\$ (15,951)	\$ (27,573)	\$ (41,597)	\$ (84,115)	\$ (84,013)	
Net Cost for Phase 2	\$ 4,358,933	\$ 8,080,316	\$ -	\$ -	\$ -	\$ 12,439,249
Cost Per Acre	\$ 49,421	\$ 78,602	\$ -	\$ -	\$ -	
Net Cost for Village 1	\$ 11,574,400	\$ 41,069,700	\$ 11,154,100	\$ 6,413,100	\$ 8,674,600	\$ 78,885,900
Cost Per Acre	\$ 49,421	\$ 78,602	\$ 122,573	\$ 222,677	\$ 222,426	

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18  
Based on Projected Units

<b>Engineer's Opinion of Costs</b>						
<b>Village 1: Overall Comparison with Phase 3 - Consolidated</b>						
<b>(Costs per Land Use Based on PFE Weighted Factor)</b>						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Village 1 Number of Units	469	2090	728	519	702	4508
Phase 3 Number of Units	0	562	136	0	196	894
Total Acres	0	140.3	17	0	10.9	168.2
Infrastructure Costs per Land Use	\$ -	\$ 10,638,267	\$ 2,084,659	\$ -	\$ 2,274,175	\$ 14,997,100
(Owner Finance) Cost Per Acre	\$ -	\$ 75,825	\$ 122,627	\$ -	\$ 208,640	
PFE Infrastructure Costs per Land Use	\$ -	\$ 5,611,901	\$ 1,039,245	\$ -	\$ 1,361,854	\$ 8,013,000
(Owner Finance) Cost Per Acre	\$ -	\$ 39,999	\$ 61,132	\$ -	\$ 124,941	
Total Financed Construction Costs	\$ -	\$ 16,250,167	\$ 3,123,904	\$ -	\$ 3,636,029	\$ 23,010,100
(Owner Finance) Cost Per Acre	\$ -	\$ 115,824	\$ 183,759	\$ -	\$ 333,581	
Total Costs for Overall Village 1	\$ 15,310,200	\$ 55,476,700	\$ 14,939,400	\$ 8,835,600	\$ 11,951,100	\$ 106,513,000
Village 1 Total Cost Per Acre	\$ 65,372	\$ 106,176	\$ 164,169	\$ 306,792	\$ 306,438	
Potential PFE Reimbursement from Collected Impact Fees <sup>1</sup>	\$ -	\$ (5,611,901)	\$ (1,039,245)	\$ -	\$ (1,361,854)	\$ (8,013,000)
PFE Credit Per Acre	\$ -	\$ (39,999)	\$ (61,132)	\$ -	\$ (124,941)	
Additional Reimbursement paid to Village 1	\$ -	\$ 389,636	\$ (926)	\$ -	\$ 150,265	\$ 538,975
Additional Reimbursement Per Acre	\$ -	\$ 2,777	\$ (54)	\$ -	\$ 13,786	
PFE Cash Reserve from Collected Impact Fees	\$ (3,735,800)	\$ (14,407,000)	\$ (3,785,300)	\$ (2,422,500)	\$ (3,276,500)	\$ (27,627,100)
Village 1 PFE Credit Per Acre	\$ (15,951)	\$ (27,573)	\$ (41,597)	\$ (84,115)	\$ (84,013)	
Net Cost for Phase 3	\$ -	\$ 11,027,902	\$ 2,083,733	\$ -	\$ 2,424,439	\$ 15,536,075
Cost Per Acre	\$ -	\$ 78,602	\$ 122,573	\$ -	\$ 222,426	
Net Cost for Village 1	\$ 11,574,400	\$ 41,069,700	\$ 11,154,100	\$ 6,413,100	\$ 8,674,600	\$ 78,885,900
Cost Per Acre	\$ 49,421	\$ 78,602	\$ 122,573	\$ 222,677	\$ 222,426	

1. Potential PFE reimbursement from issued building permits if all permits from prior phases have been issued. If not all building permits have been issued, PFE reimbursement may be available in subsequent phases.

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18  
Based on Projected Units



<b>Engineer's Opinion of Costs</b>						
<b>Village 1: Overall Comparison with Phase 4 - Consolidated</b>						
<b>(Costs per Land Use Based on PFE Weighted Factor)</b>						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Village 1 Number of Units	469	2090	728	519	702	4508
Phase 4 Number of Units	114	29	187	157	184	671
Total Acres	57	7.3	23.4	8.7	10.2	106.6
Infrastructure Costs per Land Use	\$ 2,454,241	\$ 509,917	\$ 2,556,797	\$ 1,786,460	\$ 2,093,686	\$ 9,401,100
(Owner Finance) Cost Per Acre	\$ 43,057	\$ 69,852	\$ 109,265	\$ 205,340	\$ 205,263	
PFE Infrastructure Costs per Land Use	\$ 1,194,156	\$ 212,916	\$ 1,056,789	\$ 531,147	\$ 622,491	\$ 3,617,500
(Owner Finance) Cost Per Acre	\$ 20,950	\$ 29,167	\$ 45,162	\$ 61,051	\$ 61,029	
Total Financed Construction Costs	\$ 3,648,397	\$ 722,833	\$ 3,613,586	\$ 2,317,607	\$ 2,716,177	\$ 13,018,600
(Owner Finance) Cost Per Acre	\$ 64,007	\$ 99,018	\$ 154,427	\$ 266,392	\$ 266,292	
Total Costs for Overall Village 1	\$ 15,310,200	\$ 55,476,700	\$ 14,939,400	\$ 8,835,600	\$ 11,951,100	\$ 106,513,000
Village 1 Total Cost Per Acre	\$ 65,372	\$ 106,176	\$ 164,169	\$ 306,792	\$ 306,438	
Potential PFE Reimbursement from Collected Impact Fees <sup>1</sup>	\$ (1,194,156)	\$ (212,916)	\$ (1,056,789)	\$ (531,147)	\$ (622,491)	\$ (3,617,500)
PFE Credit Per Acre	\$ (20,950)	\$ (29,167)	\$ (45,162)	\$ (61,051)	\$ (61,029)	
Additional Reimbursement paid to Village 1	\$ 362,757	\$ 63,880	\$ 311,401	\$ 150,831	\$ 175,056	\$ 1,063,924
Additional Reimbursement Per Acre	\$ 6,364	\$ 8,751	\$ 13,308	\$ 17,337	\$ 17,162	
PFE Cash Reserve from Collected Impact Fees	\$ (3,735,800)	\$ (14,407,000)	\$ (3,785,300)	\$ (2,422,500)	\$ (3,276,500)	\$ (27,627,100)
Village 1 PFE Credit Per Acre	\$ (15,951)	\$ (27,573)	\$ (41,597)	\$ (84,115)	\$ (84,013)	
Net Cost for Phase 4	\$ 2,816,997	\$ 573,797	\$ 2,868,197	\$ 1,937,291	\$ 2,268,742	\$ 10,465,024
Cost Per Acre	\$ 49,421	\$ 78,602	\$ 122,573	\$ 222,677	\$ 222,426	
Net Cost for Village 1	\$ 11,574,400	\$ 41,069,700	\$ 11,154,100	\$ 6,413,100	\$ 8,674,600	\$ 78,885,900
Cost Per Acre	\$ 49,421	\$ 78,602	\$ 122,573	\$ 222,677	\$ 222,426	

1. Potential PFE reimbursement from issued building permits if all permits from prior phases have been issued. If not all building permits have been issued, PFE reimbursement may be available in subsequent phases.

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18  
Based on Projected Units

<b>Engineer's Opinion of Costs</b>						
<b>Village 1: Overall Comparison with Phase 5 - Consolidated</b>						
<b>(Costs per Land Use Based on PFE Weighted Factor)</b>						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Village 1 Number of Units	469	2090	728	519	702	4508
Phase 5 Number of Units	40	128	229	362	158	917
Total Acres	19.8	32.1	28.6	20.1	8.8	109.4
Infrastructure Costs per Land Use	\$ 669,661	\$ 1,786,892	\$ 2,472,888	\$ 3,169,073	\$ 1,383,186	\$ 9,481,700
(Owner Finance) Cost Per Acre	\$ 33,821	\$ 55,666	\$ 86,465	\$ 157,665	\$ 157,180	
PFE Infrastructure Costs per Land Use	\$ 145,973	\$ 467,115	\$ 601,702	\$ 951,162	\$ 415,148	\$ 2,581,100
(Owner Finance) Cost Per Acre	\$ 7,372	\$ 14,552	\$ 21,039	\$ 47,321	\$ 47,176	
Total Financed Construction Costs	\$ 815,635	\$ 2,254,006	\$ 3,074,590	\$ 4,120,235	\$ 1,798,334	\$ 12,062,800
(Owner Finance) Cost Per Acre	\$ 41,194	\$ 70,218	\$ 107,503	\$ 204,987	\$ 204,356	
Total Costs for Overall Village 1	\$ 15,310,200	\$ 55,476,700	\$ 14,939,400	\$ 8,835,600	\$ 11,951,100	\$ 106,513,000
Village 1 Total Cost Per Acre	\$ 65,372	\$ 106,176	\$ 164,169	\$ 306,792	\$ 306,438	
Potential PFE Reimbursement from Collected Impact Fees <sup>1</sup>	\$ (145,973)	\$ (467,115)	\$ (601,702)	\$ (951,162)	\$ (415,148)	\$ (2,581,100)
PFE Credit Per Acre	\$ (7,372)	\$ (14,552)	\$ (21,039)	\$ (47,321)	\$ (47,176)	
Additional Reimbursement paid to Village 1	\$ 308,875	\$ 736,242	\$ 1,032,686	\$ 1,306,737	\$ 574,159	\$ 3,958,699
Additional Reimbursement Per Acre	\$ 15,600	\$ 22,936	\$ 36,108	\$ 65,012	\$ 65,245	
PFE Cash Reserve from Collected Impact Fees	\$ (3,735,800)	\$ (14,407,000)	\$ (3,785,300)	\$ (2,422,500)	\$ (3,276,500)	\$ (27,627,100)
Village 1 PFE Credit Per Acre	\$ (15,951)	\$ (27,573)	\$ (41,597)	\$ (84,115)	\$ (84,013)	
Net Cost for Phase 5	\$ 978,536	\$ 2,523,134	\$ 3,505,574	\$ 4,475,809	\$ 1,957,346	\$ 13,440,399
Cost Per Acre	\$ 49,421	\$ 78,602	\$ 122,573	\$ 222,677	\$ 222,426	
Net Cost for Village 1	\$ 11,574,400	\$ 41,069,700	\$ 11,154,100	\$ 6,413,100	\$ 8,674,600	\$ 78,885,900
Cost Per Acre	\$ 49,421	\$ 78,602	\$ 122,573	\$ 222,677	\$ 222,426	

1. Potential PFE reimbursement from issued building permits if all permits from prior phases have been issued. If not all building permits have been issued, PFE reimbursement may be available in subsequent phases.

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18  
Based on Projected Units

<b>Engineer's Opinion of Costs</b>						
<b>Village 1: Overall Comparison with Phase 6 - Consolidated</b>						
<b>(Costs per Land Use Based on PFE Weighted Factor)</b>						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Village 1 Number of Units	469	2090	728	519	702	4508
Phase 6 Number of Units	18	455	105	0	164	742
Total Acres	9.1	113.7	13.1	0	9.1	145
Infrastructure Costs per Land Use	\$ 145,117	\$ 2,939,371	\$ 534,533	\$ -	\$ 679,579	\$ 4,298,600
(Owner Finance) Cost Per Acre	\$ 15,947	\$ 25,852	\$ 40,804	\$ -	\$ 74,679	
PFE Infrastructure Costs per Land Use	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(Owner Finance) Cost Per Acre	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Financed Construction Costs	\$ 145,117	\$ 2,939,371	\$ 534,533	\$ -	\$ 679,579	\$ 4,298,600
(Owner Finance) Cost Per Acre	\$ 15,947	\$ 25,852	\$ 40,804	\$ -	\$ 74,679	
Total Costs for Overall Village 1	\$ 15,310,200	\$ 55,476,700	\$ 14,939,400	\$ 8,835,600	\$ 11,951,100	\$ 106,513,000
Village 1 Total Cost Per Acre	\$ 65,372	\$ 106,176	\$ 164,169	\$ 306,792	\$ 306,438	
Potential PFE Reimbursement from Collected Impact Fees <sup>1</sup>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PFE Credit Per Acre	\$ -	\$ -	\$ -	\$ -	\$ -	
Additional Reimbursement paid to Village 1	\$ 304,614	\$ 5,997,710	\$ 1,071,167	\$ -	\$ 1,344,495	\$ 8,717,986
Additional Reimbursement Per Acre	\$ 33,474	\$ 52,750	\$ 81,768	\$ -	\$ 147,747	
PFE Cash Reserve from Collected Impact Fees	\$ (3,735,800)	\$ (14,407,000)	\$ (3,785,300)	\$ (2,422,500)	\$ (3,276,500)	\$ (27,627,100)
Village 1 PFE Credit Per Acre	\$ (15,951)	\$ (27,573)	\$ (41,597)	\$ (84,115)	\$ (84,013)	
Net Cost for Phase 6	\$ 449,731	\$ 8,937,081	\$ 1,605,700	\$ -	\$ 2,024,073	\$ 13,016,586
Cost Per Acre	\$ 49,421	\$ 78,602	\$ 122,573	\$ -	\$ 222,426	
Net Cost for Village 1	\$ 11,574,400	\$ 41,069,700	\$ 11,154,100	\$ 6,413,100	\$ 8,674,600	\$ 78,885,900
Cost Per Acre	\$ 49,421	\$ 78,602	\$ 122,573	\$ 222,677	\$ 222,426	

1. Potential PFE reimbursement from issued building permits if all permits from prior phases have been issued. If not all building permits have been issued, PFE reimbursement may be available in subsequent phases.

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18  
Based on Projected Units

<b>Engineer's Opinion of Costs</b>						
<b>Village 1: Overall Comparison with Phase 7 - Consolidated</b>						
<b>(Costs per Land Use Based on PFE Weighted Factor)</b>						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Village 1 Number of Units	469	2090	728	519	702	4508
Phase 7 Number of Units	93	0	0	0	0	93
Total Acres	46.3	0	0	0	0	46.3
Infrastructure Costs per Land Use	\$ 10,143,500	\$ -	\$ -	\$ -	\$ -	\$ 10,143,500
(Owner Finance) Cost Per Acre	\$ 219,082	\$ -	\$ -	\$ -	\$ -	
PFE Infrastructure Costs per Land Use	\$ 9,241,100	\$ -	\$ -	\$ -	\$ -	\$ 9,241,100
(Owner Finance) Cost Per Acre	\$ 199,592	\$ -	\$ -	\$ -	\$ -	
Total Financed Construction Costs	\$ 19,384,600	\$ -	\$ -	\$ -	\$ -	\$ 19,384,600
(Owner Finance) Cost Per Acre	\$ 418,674	\$ -	\$ -	\$ -	\$ -	
Total Costs for Overall Village 1	\$ 15,310,200	\$ 55,476,700	\$ 14,939,400	\$ 8,835,600	\$ 11,951,100	\$ 106,513,000
Village 1 Total Cost Per Acre	\$ 65,372	\$ 106,176	\$ 164,169	\$ 306,792	\$ 306,438	
Potential PFE Reimbursement from Collected Impact Fees <sup>1</sup>	\$ (9,241,100)	\$ -	\$ -	\$ -	\$ -	\$ (9,241,100)
PFE Credit Per Acre	\$ (199,592)	\$ -	\$ -	\$ -	\$ -	
Additional Reimbursement from Village 1	\$ (7,855,307)	\$ -	\$ -	\$ -	\$ -	\$ (7,855,307)
Additional Reimbursement Per Acre	\$ (169,661)	\$ -	\$ -	\$ -	\$ -	
PFE Cash Reserve from Collected Impact Fees	\$ (3,735,800)	\$ (14,407,000)	\$ (3,785,300)	\$ (2,422,500)	\$ (3,276,500)	\$ (27,627,100)
Village 1 PFE Credit Per Acre	\$ (15,951)	\$ (27,573)	\$ (41,597)	\$ (84,115)	\$ (84,013)	
Net Cost for Phase 7	\$ 2,288,193	\$ -	\$ -	\$ -	\$ -	\$ 2,288,193
Cost Per Acre	\$ 49,421	\$ -	\$ -	\$ -	\$ -	
Net Cost for Village 1	\$ 11,574,400	\$ 41,069,700	\$ 11,154,100	\$ 6,413,100	\$ 8,674,600	\$ 78,885,900
Cost Per Acre	\$ 49,421	\$ 78,602	\$ 122,573	\$ 222,677	\$ 222,426	

1. Potential PFE reimbursement from issued building permits if all permits from prior phases have been issued. If not all building permits have been issued, PFE reimbursement may be available in subsequent phases.

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18  
Based on Projected Units

<b>Engineer's Opinion of Costs</b>						
<b>Village 1: Overall Comparison with Phase 8 - Consolidated</b>						
<b>(Costs per Land Use Based on PFE Weighted Factor)</b>						
	VCE	VLDR	VMDR	VHDR	VMU	Total
Village 1 Number of Units	469	2090	728	519	702	4508
Phase 8 Number of Units	0	0	71	0	0	71
Total Acres	0	0	8.9	0	0	8.9
Infrastructure Costs per Land Use	\$ -	\$ -	\$ 243,200	\$ -	\$ -	\$ 243,200
(Owner Finance) Cost Per Acre	\$ -	\$ -	\$ 27,326	\$ -	\$ -	
PFE Infrastructure Costs per Land Use	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
(Owner Finance) Cost Per Acre	\$ -	\$ -	\$ -	\$ -	\$ -	
Total Financed Construction Costs	\$ -	\$ -	\$ 243,200	\$ -	\$ -	\$ 243,200
(Owner Finance) Cost Per Acre	\$ -	\$ -	\$ 27,326	\$ -	\$ -	
Total Costs for Overall Village 1	\$ 15,310,200	\$ 55,476,700	\$ 14,939,400	\$ 8,835,600	\$ 11,951,100	\$ 106,513,000
Village 1 Total Cost Per Acre	\$ 65,372	\$ 106,176	\$ 164,169	\$ 306,792	\$ 306,438	
Potential PFE Reimbursement from Collected Impact Fees <sup>1</sup>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PFE Credit Per Acre	\$ -	\$ -	\$ -	\$ -	\$ -	
Additional Reimbursement paid to Village 1	\$ -	\$ -	\$ 847,695	\$ -	\$ -	\$ 847,695
Additional Reimbursement Per Acre	\$ -	\$ -	\$ 95,247	\$ -	\$ -	
PFE Cash Reserve from Collected Impact Fees	\$ (3,735,800)	\$ (14,407,000)	\$ (3,785,300)	\$ (2,422,500)	\$ (3,276,500)	\$ (27,627,100)
Village 1 PFE Credit Per Acre	\$ (15,951)	\$ (27,573)	\$ (41,597)	\$ (84,115)	\$ (84,013)	
Net Cost for Phase 8	\$ -	\$ -	\$ 1,090,895	\$ -	\$ -	\$ 1,090,895
Cost Per Acre	\$ -	\$ -	\$ 122,573	\$ -	\$ -	
Net Cost for Village 1	\$ 11,574,400	\$ 41,069,700	\$ 11,154,100	\$ 6,413,100	\$ 8,674,600	\$ 78,885,900
Cost Per Acre	\$ 49,421	\$ 78,602	\$ 122,573	\$ 222,677	\$ 222,426	

1. Potential PFE reimbursement from issued building permits if all permits from prior phases have been issued. If not all building permits have been issued, PFE reimbursement may be available in subsequent phases.

Developable area is from the Specific Plan.  
EDU per Acre is as follows: VCE 2, VLDR 4,  
VMDR 8, VHDR 18, VMU 18  
Based on Projected Units

**APPENDIX 13**

**Lincoln Village 1 Specific Plan**

**Infrastructure Finance Plan**

**Water PFE Costs**

**Engineer's Opinion of Costs**  
**Village 1 - Backbone Water**  
**PFE Credit Summary**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	7,145	\$100	\$714,500
4	16" Water Line (Required Improvement)	LF	7,145	-\$85	-\$607,300
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	200	\$150	\$30,000
8	16" Water Line (Required Improvement)	LF	200	-\$85	-\$17,000
9	30" Water Line	LF	2,840	\$175	\$497,100
10	16" Water Line (Required Improvement)	LF	2,840	-\$85	-\$241,500
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	15	\$8,500	\$127,500
14	16" Water Valve (Required Improvement)	EA	15	-\$6,500	-\$97,500
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	3	\$35,000	\$105,000
18	16" Water Valve (Required Improvement)	EA	5	-\$6,500	-\$32,500
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$478,300</b>

**Contingency Based upon Hard Costs (15/):** \$71,800

**Soft Costs Contingency (17/):** \$81,300

**TOTAL WATER SYSTEM \$631,400**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

**Engineer's Opinion of Costs**  
**Village 1 - Backbone Water**  
**PFE Credit Phase 1 Summary**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	7,145	\$100	\$714,500
4	16" Water Line (Required Improvement)	LF	7,145	-\$85	-\$607,300
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	200	\$150	\$30,000
8	16" Water Line (Required Improvement)	LF	200	-\$85	-\$17,000
9	30" Water Line	LF	1,710	\$175	\$299,300
10	16" Water Line (Required Improvement)	LF	1,710	-\$85	-\$145,400
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	15	\$8,500	\$127,500
14	16" Water Valve (Required Improvement)	EA	15	-\$6,500	-\$97,500
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	2	\$35,000	\$70,000
18	16" Water Valve (Required Improvement)	EA	3	-\$6,500	-\$19,500
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$354,600</b>

**Contingency Based upon Hard Costs (15/):** \$53,200

**Soft Costs Contingency (17/):** \$60,300

**TOTAL WATER SYSTEM \$468,100**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets



Engineer's Opinion of Costs					
Village 1 - Backbone Water					
PFE Credit Phase 1 Oak Tree Lane 5 (V1W2)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	0	\$100	\$0
4	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	0	\$150	\$0
8	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
9	30" Water Line	LF	500	\$175	\$87,500
10	16" Water Line (Required Improvement)	LF	500	-\$85	-\$42,500
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	0	\$8,500	\$0
14	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	1	\$35,000	\$35,000
18	16" Water Valve (Required Improvement)	EA	1	-\$6,500	-\$6,500
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$73,500</b>

Contingency Based upon Hard Costs (15/): \$11,000

Soft Costs Contingency (17/): \$12,500

**TOTAL WATER SYSTEM \$97,000**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

**Engineer's Opinion of Costs**
**Village 1 - Backbone Water**
**PFE Credit Phase 1 Oak Tree Lane 7 (V1W2)**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	0	\$100	\$0
4	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	0	\$150	\$0
8	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
9	30" Water Line	LF	210	\$175	\$36,800
10	16" Water Line (Required Improvement)	LF	210	-\$85	-\$17,900
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	0	\$8,500	\$0
14	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	0	\$35,000	\$0
18	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$18,900</b>

Contingency Based upon Hard Costs (15/): \$2,800

Soft Costs Contingency (17/): \$3,200

**TOTAL WATER SYSTEM \$24,900**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

Engineer's Opinion of Costs					
Village 1 - Backbone Water					
PFE Credit Phase 1 Oak Tree Lane 8 (V1W3)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	0	\$100	\$0
4	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	0	\$150	\$0
8	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
9	30" Water Line	LF	1,000	\$175	\$175,000
10	16" Water Line (Required Improvement)	LF	1,000	-\$85	-\$85,000
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	0	\$8,500	\$0
14	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	1	\$35,000	\$35,000
18	16" Water Valve (Required Improvement)	EA	2	-\$6,500	-\$13,000
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$112,000</b>

Contingency Based upon Hard Costs (15/): \$16,900

Soft Costs Contingency (17/): \$19,100

**TOTAL WATER SYSTEM \$148,000**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

Engineer's Opinion of Costs					
Village 1 - Backbone Water					
PFE Credit Phase 1 Oak Tree Lane 9 (V1W4-5)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	2,660	\$100	\$266,000
4	16" Water Line (Required Improvement)	LF	2,660	-\$85	-\$226,100
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	200	\$150	\$30,000
8	16" Water Line (Required Improvement)	LF	200	-\$85	-\$17,000
9	30" Water Line	LF	0	\$175	\$0
10	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	5	\$8,500	\$42,500
14	16" Water Valve (Required Improvement)	EA	5	-\$6,500	-\$32,500
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	0	\$35,000	\$0
18	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$62,900</b>

Contingency Based upon Hard Costs (15/): \$9,400

Soft Costs Contingency (17/): \$10,700

**TOTAL WATER SYSTEM \$83,000**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

Engineer's Opinion of Costs					
Village 1 - Backbone Water					
PFE Credit Phase 1 State Route 193 1 (V1W10)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	830	\$100	\$83,000
4	16" Water Line (Required Improvement)	LF	830	-\$85	-\$70,500
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	0	\$150	\$0
8	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
9	30" Water Line	LF	0	\$175	\$0
10	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	2	\$8,500	\$17,000
14	16" Water Valve (Required Improvement)	EA	2	-\$6,500	-\$13,000
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	0	\$35,000	\$0
18	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$16,500</b>

Contingency Based upon Hard Costs (15/): \$2,500

Soft Costs Contingency (17/): \$2,800

**TOTAL WATER SYSTEM \$21,800**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

Engineer's Opinion of Costs					
Village 1 - Backbone Water					
PFE Credit Phase 1 State Route 193 2 (V1W10)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	1,340	\$100	\$134,000
4	16" Water Line (Required Improvement)	LF	1,340	-\$85	-\$113,900
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	0	\$150	\$0
8	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
9	30" Water Line	LF	0	\$175	\$0
10	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	3	\$8,500	\$25,500
14	16" Water Valve (Required Improvement)	EA	3	-\$6,500	-\$19,500
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	0	\$35,000	\$0
18	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$26,100</b>

Contingency Based upon Hard Costs (15/): \$3,900

Soft Costs Contingency (17/): \$4,400

**TOTAL WATER SYSTEM \$34,400**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

Engineer's Opinion of Costs					
Village 1 - Backbone Water					
PFE Credit Phase 1 State Route 193 3 (V1W10)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	1,975	\$100	\$197,500
4	16" Water Line (Required Improvement)	LF	1,975	-\$85	-\$167,900
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	0	\$150	\$0
8	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
9	30" Water Line	LF	0	\$175	\$0
10	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	4	\$8,500	\$34,000
14	16" Water Valve (Required Improvement)	EA	4	-\$6,500	-\$26,000
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	0	\$35,000	\$0
18	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$37,600</b>

Contingency Based upon Hard Costs (15/): \$5,600

Soft Costs Contingency (17/): \$6,400

**TOTAL WATER SYSTEM \$49,600**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

**Village 1 - Backbone Water**
**PFE Credit Phase 1 State Route 193 4 (V1W10)**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	340	\$100	\$34,000
4	16" Water Line (Required Improvement)	LF	340	-\$85	-\$28,900
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	0	\$150	\$0
8	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
9	30" Water Line	LF	0	\$175	\$0
10	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	1	\$8,500	\$8,500
14	16" Water Valve (Required Improvement)	EA	1	-\$6,500	-\$6,500
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	0	\$35,000	\$0
18	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$7,100</b>

**Contingency Based upon Hard Costs (15/):** \$1,100

**Soft Costs Contingency (17/):** \$1,200

**TOTAL WATER SYSTEM** **\$9,400**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets



**Engineer's Opinion of Costs**  
**Village 1 - Backbone Water**  
**PFE Credit Phase 2 Summary**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	0	\$100	\$0
4	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	0	\$150	\$0
8	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
9	30" Water Line	LF	1,130	\$175	\$197,800
10	16" Water Line (Required Improvement)	LF	1,130	-\$85	-\$96,100
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	0	\$8,500	\$0
14	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	1	\$35,000	\$35,000
18	16" Water Valve (Required Improvement)	EA	2	-\$6,500	-\$13,000
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$123,700</b>

**Contingency Based upon Hard Costs (15/):** \$18,600

**Soft Costs Contingency (17/):** \$21,000

**TOTAL WATER SYSTEM** **\$163,300**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

Engineer's Opinion of Costs					
Village 1 - Backbone Water					
PFE Credit Phase 2 Oak Tree Lane 4 (V1W2)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	0	\$100	\$0
4	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	0	\$150	\$0
8	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
9	30" Water Line	LF	1,130	\$175	\$197,800
10	16" Water Line (Required Improvement)	LF	1,130	-\$85	-\$96,100
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	0	\$8,500	\$0
14	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	1	\$35,000	\$35,000
18	16" Water Valve (Required Improvement)	EA	2	-\$6,500	-\$13,000
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$123,700</b>

Contingency Based upon Hard Costs (15/): \$18,600

Soft Costs Contingency (17/): \$21,000

**TOTAL WATER SYSTEM \$163,300**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

**Engineer's Opinion of Costs**  
**Village 1 - Backbone Water**  
**PFE Summary**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	1,400	\$100	\$140,000
4	16" Water Line (Required Improvement)	LF	1,400	-\$85	-\$119,000
5	24" Water Line across Auburn Ravine Bridge *	LF	550	\$200	\$110,000
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	550	-\$135	-\$74,300
7	24" Water Line	LF	5,020	\$150	\$753,100
8	16" Water Line (Required Improvement)	LF	5,020	-\$85	-\$426,700
9	30" Water Line	LF	2,940	\$175	\$514,600
10	16" Water Line (Required Improvement)	LF	2,940	-\$85	-\$250,000
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	3	\$8,500	\$25,500
14	16" Water Valve (Required Improvement)	EA	3	-\$6,500	-\$19,500
15	24" Water Valve	EA	5	\$30,000	\$150,000
16	16" Water Valve (Required Improvement)	EA	10	-\$6,500	-\$65,000
17	30" Water Valve	EA	3	\$35,000	\$105,000
18	16" Water Valve (Required Improvement)	EA	6	-\$6,500	-\$39,000
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	2	\$50,000	\$100,000
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	2	-\$34,000	-\$68,000
25	Demolish and Remove Existing 20" Water	LF	2	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$836,700</b>

**Contingency Based upon Hard Costs (15/):** \$125,400

**Soft Costs Contingency (17/):** \$142,200

**TOTAL WATER SYSTEM \$1,104,300**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

**Engineer's Opinion of Costs**  
**Village 1 - Backbone Water**  
**PFE Phase 3 Summary**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	0	\$100	\$0
4	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	4,055	\$150	\$608,300
8	16" Water Line (Required Improvement)	LF	4,055	-\$85	-\$344,700
9	30" Water Line	LF	1,130	\$175	\$197,800
10	16" Water Line (Required Improvement)	LF	1,130	-\$85	-\$96,100
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	0	\$8,500	\$0
14	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
15	24" Water Valve	EA	4	\$30,000	\$120,000
16	16" Water Valve (Required Improvement)	EA	8	-\$6,500	-\$52,000
17	30" Water Valve	EA	1	\$35,000	\$35,000
18	16" Water Valve (Required Improvement)	EA	2	-\$6,500	-\$13,000
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$455,300</b>

**Contingency Based upon Hard Costs (15/):** \$68,300

**Soft Costs Contingency (17/):** \$77,400

**TOTAL WATER SYSTEM** **\$601,000**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

Engineer's Opinion of Costs					
Village 1 - Backbone Water					
PFE Phase 3 Oak Tree Lane 3 (V1W2)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	0	\$100	\$0
4	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	0	\$150	\$0
8	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
9	30" Water Line	LF	1,130	\$175	\$197,800
10	16" Water Line (Required Improvement)	LF	1,130	-\$85	-\$96,100
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	0	\$8,500	\$0
14	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	1	\$35,000	\$35,000
18	16" Water Valve (Required Improvement)	EA	2	-\$6,500	-\$13,000
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$123,700</b>

Contingency Based upon Hard Costs (15/): \$18,600

Soft Costs Contingency (17/): \$21,000

**TOTAL WATER SYSTEM \$163,300**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

Engineer's Opinion of Costs					
Village 1 - Backbone Water					
PFE Phase 3 Oak Tree Lane 10 (V1W6)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	0	\$100	\$0
4	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	3,090	\$150	\$463,500
8	16" Water Line (Required Improvement)	LF	3,090	-\$85	-\$262,700
9	30" Water Line	LF	0	\$175	\$0
10	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	0	\$8,500	\$0
14	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
15	24" Water Valve	EA	3	\$30,000	\$90,000
16	16" Water Valve (Required Improvement)	EA	6	-\$6,500	-\$39,000
17	30" Water Valve	EA	0	\$35,000	\$0
18	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$251,800</b>

Contingency Based upon Hard Costs (15/): \$37,700

Soft Costs Contingency (17/): \$42,800

**TOTAL WATER SYSTEM \$332,300**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

Engineer's Opinion of Costs					
Village 1 - Backbone Water					
PFE Phase 3 Oak Tree Lane 11 (V1W7)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	0	\$100	\$0
4	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	965	\$150	\$144,800
8	16" Water Line (Required Improvement)	LF	965	-\$85	-\$82,000
9	30" Water Line	LF	0	\$175	\$0
10	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	0	\$8,500	\$0
14	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
15	24" Water Valve	EA	1	\$30,000	\$30,000
16	16" Water Valve (Required Improvement)	EA	2	-\$6,500	-\$13,000
17	30" Water Valve	EA	0	\$35,000	\$0
18	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$79,800</b>

Contingency Based upon Hard Costs (15/): \$12,000

Soft Costs Contingency (17/): \$13,600

**TOTAL WATER SYSTEM \$105,400**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

**Engineer's Opinion of Costs**  
**Village 1 - Backbone Water**  
**PFE Phase 4 Summary**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	0	\$100	\$0
4	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	0	\$150	\$0
8	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
9	30" Water Line	LF	1,810	\$175	\$316,800
10	16" Water Line (Required Improvement)	LF	1,810	-\$85	-\$153,900
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	0	\$8,500	\$0
14	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	2	\$35,000	\$70,000
18	16" Water Valve (Required Improvement)	EA	4	-\$6,500	-\$26,000
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$206,900</b>

**Contingency Based upon Hard Costs (15/):** \$31,000

**Soft Costs Contingency (17/):** \$35,200

**TOTAL WATER SYSTEM** **\$273,100**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets



Engineer's Opinion of Costs					
Village 1 - Backbone Water					
PFE Phase 4 Oak Tree Lane to Water Tank 2 (V1W1)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	0	\$100	\$0
4	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	0	\$150	\$0
8	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
9	30" Water Line	LF	1,810	\$175	\$316,800
10	16" Water Line (Required Improvement)	LF	1,810	-\$85	-\$153,900
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	0	\$8,500	\$0
14	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	2	\$35,000	\$70,000
18	16" Water Valve (Required Improvement)	EA	4	-\$6,500	-\$26,000
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$206,900</b>

Contingency Based upon Hard Costs (15/): \$31,000

Soft Costs Contingency (17/): \$35,200

**TOTAL WATER SYSTEM \$273,100**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

**Engineer's Opinion of Costs**  
**Village 1 - Backbone Water**  
**PFE Phase 7 Summary**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	1,400	\$100	\$140,000
4	16" Water Line (Required Improvement)	LF	1,400	-\$85	-\$119,000
5	24" Water Line across Auburn Ravine Bridge *	LF	550	\$200	\$110,000
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	550	-\$135	-\$74,300
7	24" Water Line	LF	965	\$150	\$144,800
8	16" Water Line (Required Improvement)	LF	965	-\$85	-\$82,000
9	30" Water Line	LF	0	\$175	\$0
10	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	3	\$8,500	\$25,500
14	16" Water Valve (Required Improvement)	EA	3	-\$6,500	-\$19,500
15	24" Water Valve	EA	1	\$30,000	\$30,000
16	16" Water Valve (Required Improvement)	EA	2	-\$6,500	-\$13,000
17	30" Water Valve	EA	0	\$35,000	\$0
18	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	2	\$50,000	\$100,000
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	2	-\$34,000	-\$68,000
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$174,500</b>

**Contingency Based upon Hard Costs (15/):** \$26,200

**Soft Costs Contingency (17/):** \$29,700

**TOTAL WATER SYSTEM \$230,400**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

Engineer's Opinion of Costs					
Village 1 - Backbone Water					
PFE Phase 7 Oak Tree Lane 12 (V1W8)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	0	\$100	\$0
4	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	140	\$150	\$21,000
8	16" Water Line (Required Improvement)	LF	140	-\$85	-\$11,900
9	30" Water Line	LF	0	\$175	\$0
10	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	0	\$8,500	\$0
14	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	0	\$35,000	\$0
18	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$9,100</b>

Contingency Based upon Hard Costs (15/): \$1,400

Soft Costs Contingency (17/): \$1,500

**TOTAL WATER SYSTEM \$12,000**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

Engineer's Opinion of Costs					
Village 1 - Backbone Water					
PFE Phase 7 Oak Tree Lane 13 (V1W8)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	0	\$100	\$0
4	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
5	24" Water Line across Auburn Ravine Bridge *	LF	550	\$200	\$110,000
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	550	-\$135	-\$74,300
7	24" Water Line	LF	825	\$150	\$123,800
8	16" Water Line (Required Improvement)	LF	825	-\$85	-\$70,100
9	30" Water Line	LF	0	\$175	\$0
10	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	0	\$8,500	\$0
14	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
15	24" Water Valve	EA	1	\$30,000	\$30,000
16	16" Water Valve (Required Improvement)	EA	2	-\$6,500	-\$13,000
17	30" Water Valve	EA	0	\$35,000	\$0
18	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	2	\$50,000	\$100,000
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	2	-\$34,000	-\$68,000
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$138,400</b>

Contingency Based upon Hard Costs (15/): \$20,700

Soft Costs Contingency (17/): \$23,600

**TOTAL WATER SYSTEM \$182,700**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

Engineer's Opinion of Costs					
Village 1 - Backbone Water					
PFE Phase 7 Virginiatown Road 1 (V1W9)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	800	\$100	\$80,000
4	16" Water Line (Required Improvement)	LF	800	-\$85	-\$68,000
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	0	\$150	\$0
8	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
9	30" Water Line	LF	0	\$175	\$0
10	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	2	\$8,500	\$17,000
14	16" Water Valve (Required Improvement)	EA	2	-\$6,500	-\$13,000
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	0	\$35,000	\$0
18	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$16,000</b>

Contingency Based upon Hard Costs (15/): \$2,400

Soft Costs Contingency (17/): \$2,700

**TOTAL WATER SYSTEM \$21,100**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

**Engineer's Opinion of Costs**
**Village 1 - Backbone Water**
**PFE Phase 7 Virginiatown Road 2 (V1W9)**

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Water System</b>					
1	12" Water Line	LF	0	\$70	\$0
2	16" Water Line	LF	0	\$85	\$0
3	18" Water Line	LF	600	\$100	\$60,000
4	16" Water Line (Required Improvement)	LF	600	-\$85	-\$51,000
5	24" Water Line across Auburn Ravine Bridge *	LF	0	\$200	\$0
6	16" Water Line across Auburn Ravine Bridge * (Required Improvement)	LF	0	-\$135	\$0
7	24" Water Line	LF	0	\$150	\$0
8	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
9	30" Water Line	LF	0	\$175	\$0
10	16" Water Line (Required Improvement)	LF	0	-\$85	\$0
11	12" Water Valve	EA	0	\$3,000	\$0
12	16" Water Valve	EA	0	\$6,500	\$0
13	18" Water Valve	EA	1	\$8,500	\$8,500
14	16" Water Valve (Required Improvement)	EA	1	-\$6,500	-\$6,500
15	24" Water Valve	EA	0	\$30,000	\$0
16	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
17	30" Water Valve	EA	0	\$35,000	\$0
18	16" Water Valve (Required Improvement)	EA	0	-\$6,500	\$0
19	Pressure Reducing Valve	EA	0	\$75,000	\$0
20	Air Release Valve	EA	0	\$3,000	\$0
21	Fire Hydrant w/Tee & Valves (FH / 500')	EA	0	\$6,000	\$0
22	Bore and Jack (Across Auburn Ravine)**	EA	0	\$700	\$0
23	Flex Joints on Auburn Ravine Bridge (24" Water)	EA	0	\$50,000	\$0
24	Flex Joints on Auburn Ravine Bridge (16" Water) (Required Improvement)	EA	0	-\$34,000	\$0
25	Demolish and Remove Existing 20" Water	LF	0	\$20	\$0
26	Transmission Main Tank Connection	LS	0	\$22,000	\$0
27	Transmission Main Connection	LS	0	\$10,000	\$0
<b>Construction Total:</b>					<b>\$11,000</b>

**Contingency Based upon Hard Costs (15/):** \$1,700

**Soft Costs Contingency (17/):** \$1,900

**TOTAL WATER SYSTEM** **\$14,600**

\* Assumes that water will be completed in conjunction with the sewer bore and jack.

\*\*Including restrained joints and brackets

**APPENDIX 14**

**Lincoln Village 1 Specific Plan**

**Infrastructure Finance Plan**

**Drainage PFE Costs**

# Engineer's Opinion of Costs

## Village 1 - Drainage

### PFE Summary

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Storm Drainage System</b>					
<b>Village 1</b>					
1	12" SD Line	LF	0	\$50	\$0
2	15" SD Line	LF	0	\$60	\$0
3	18" SD Line	LF	0	\$75	\$0
4	24" SD Line	LF	0	\$85	\$0
5	30" SD Line	LF	0	\$110	\$0
6	36" SD Line	LF	0	\$125	\$0
7	42" SD Line	LF	0	\$150	\$0
8	48" SD Line	LF	0	\$180	\$0
9	60" SD Line	LF	0	\$190	\$0
10	Standard 48" SDMH (MH/400')	EA	0	\$4,250	\$0
11	Trunk 60" SDMH (MH/400')	EA	0	\$8,500	\$0
12	18" Culvert Extension	LF	0	\$125	\$0
13	24" Culvert Extension	LF	0	\$150	\$0
14	36" Culvert Extension	LF	0	\$225	\$0
15	Headwall Retrofit	EA	0	\$12,500	\$0
16	Drainage Inlet	EA	0	\$2,650	\$0
17	Drainage Inlet and Retrofit Pipe	EA	0	\$5,000	\$0
18	Grassy Swale	EA	0	\$5,000	\$0
19	Stormwater Quality Basin	EA	0	\$25,000	\$0
20	Outfall	LS	0	\$9,000	\$0
21	Culvert - 12'x5' Arch Culvert - Oak Tree near new Lake	EA	0	\$450,000	\$90,000
22	Culvert - 12'x5' Arch Culvert and 48" Culvert - Oak Tree near Regional Park *	EA	0	\$525,000	\$0
23	NID Box Culvert Expansion	EA	0	\$75,000	\$0
24	Culvert - 12'x5.5' Arch Culvert - North South Collector near State Route 193	EA	0	\$400,000	\$0
25	Culvert - 30" Culvert - Oak Tree Lane and South Ingram Slough East of No. So. Collector	EA	0	\$100,000	\$0
26	Wetland Mitigation - Oak Tree Lane Overcrossing **	EA	0	\$300,000	\$0
27	CLOMR and LOMR - Auburn Ravine next to Ferrari Ranch Road	JOB	0	\$80,000	\$0
28	Retrofit Lake outlet and berm***	EA	1	\$1,000,000	\$1,000,000
29	Grading	CY	0	\$4	\$0
30	Auburn Ravine Bank Stabilization	SF	0	\$1	\$0
31	Auburn Ravine Hydroseed	SF	0	\$0	\$0
32	Auburn Ravine Armoring	SF	0	\$15	\$0
33	Auburn Ravine Tree Planting	EA	0	\$100	\$0
<b>Construction Total:</b>					<b>\$1,090,000</b>

\* Includes traffic control and demolition of existing culverts.

\*\* Estimated costs, actual cost will be developed in conjunction with environmental consultant.

\*\*\* Further consultation will be required with geotechnical and environmental consultants to determine actual cost to retrofit lake outfall, berm and wetland permit.

**Contingency Based upon Hard Costs (15%):** \$163,500

**Soft Costs Contingency (17%):** \$185,300

**TOTAL DRAINAGE** **\$1,438,800**



# Engineer's Opinion of Costs

## Village 1 - Drainage

### PFE Phase 3 Summary

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Storm Drainage System</b>					
<b>Village 1</b>					
1	12" SD Line	LF	0	\$50	\$0
2	15" SD Line	LF	0	\$60	\$0
3	18" SD Line	LF	0	\$75	\$0
4	24" SD Line	LF	0	\$85	\$0
5	30" SD Line	LF	0	\$110	\$0
6	36" SD Line	LF	0	\$125	\$0
7	42" SD Line	LF	0	\$150	\$0
8	48" SD Line	LF	0	\$180	\$0
9	60" SD Line	LF	0	\$190	\$0
10	Standard 48" SDMH (MH/400')	EA	0	\$4,250	\$0
11	Trunk 60" SDMH (MH/400')	EA	0	\$8,500	\$0
12	18" Culvert Extension	LF	0	\$125	\$0
13	24" Culvert Extension	LF	0	\$150	\$0
14	36" Culvert Extension	LF	0	\$225	\$0
15	Headwall Retrofit	EA	0	\$12,500	\$0
16	Drainage Inlet	EA	0	\$2,650	\$0
17	Drainage Inlet and Retrofit Pipe	EA	0	\$5,000	\$0
18	Grassy Swale	EA	0	\$5,000	\$0
19	Stormwater Quality Basin	EA	0	\$25,000	\$0
20	Outfall	LS	0	\$9,000	\$0
21	Culvert - 12'x5' Arch Culvert - Oak Tree near new Lake	EA	0	\$450,000	\$90,000
22	Culvert - 12'x5' Arch Culvert and 48" Culvert - Oak Tree near Regional Park *	EA	0	\$525,000	\$0
23	NID Box Culvert Expansion	EA	0	\$75,000	\$0
24	Culvert - 12'x5.5' Arch Culvert - North South Collector near State Route 193	EA	0	\$400,000	\$0
25	Culvert - 30" Culvert - Oak Tree Lane and South Ingram Slough East of No. So. Collector	EA	0	\$100,000	\$0
26	Wetland Mitigation - Oak Tree Lane Overcrossing **	EA	0	\$300,000	\$0
27	CLOMR and LOMR - Auburn Ravine next to Ferrari Ranch Road	JOB	0	\$80,000	\$0
28	Retrofit Lake outlet and berm***	EA	0	\$1,000,000	\$0
29	Grading	CY	0	\$4	\$0
30	Auburn Ravine Bank Stabilization	SF	0	\$1	\$0
31	Auburn Ravine Hydroseed	SF	0	\$0	\$0
32	Auburn Ravine Armoring	SF	0	\$15	\$0
33	Auburn Ravine Tree Planting	EA	0	\$100	\$0
<b>Construction Total:</b>					<b>\$90,000</b>

\* Includes traffic control and demolition of existing culverts.

**Contingency Based upon Hard Costs (15%):** \$13,500

\*\* Estimated costs, actual cost will be developed in conjunction with environmental consultant.

**Soft Costs Contingency (17%):** \$15,300

\*\*\* Further consultation will be required with geotechnical and environmental consultants to determine actual cost to retrofit lake outfall, berm and wetland permit.

**TOTAL DRAINAGE** **\$118,800**

Engineer's Opinion of Costs					
Village 1 - Drainage					
Phase 3 Oak Tree Lane 7 (V1R8)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Storm Drainage System</b>					
Village 1					
1	12" SD Line	LF	0	\$50	\$0
2	15" SD Line	LF	0	\$60	\$0
3	18" SD Line	LF	0	\$75	\$0
4	24" SD Line	LF	0	\$85	\$0
5	30" SD Line	LF	0	\$110	\$0
6	36" SD Line	LF	0	\$125	\$0
7	42" SD Line	LF	0	\$150	\$0
8	48" SD Line	LF	0	\$180	\$0
9	60" SD Line	LF	0	\$190	\$0
10	Standard 48" SDMH (MH/400')	EA	0	\$4,250	\$0
11	Trunk 60" SDMH (MH/400')	EA	0	\$8,500	\$0
12	18" Culvert Extension	LF	0	\$125	\$0
13	24" Culvert Extension	LF	0	\$150	\$0
14	36" Culvert Extension	LF	0	\$225	\$0
15	Headwall Retrofit	EA	0	\$12,500	\$0
16	Drainage Inlet	EA	0	\$2,650	\$0
17	Drainage Inlet and Retrofit Pipe	EA	0	\$5,000	\$0
18	Grassy Swale	EA	0	\$5,000	\$0
19	Stormwater Quality Basin	EA	0	\$25,000	\$0
20	Outfall	LS	0	\$9,000	\$0
21	Culvert - 12'x5' Arch Culvert - Oak Tree near new Lake	EA	0.2	\$450,000	\$90,000
22	Culvert - 12'x5' Arch Culvert and 48" Culvert - Oak Tree near Regional Park *	EA	0	\$525,000	\$0
23	NID Box Culvert Expansion	EA	0	\$75,000	\$0
24	Culvert - 12'x5.5' Arch Culvert - North South Collector near State Route 193	EA	0	\$400,000	\$0
25	Culvert - 30" Culvert - Oak Tree Lane and South Ingram Slough East of No. So. Collector	EA	0	\$100,000	\$0
26	Wetland Mitigation - Oak Tree Lane Overcrossing **	EA	0	\$300,000	\$0
27	CLOMR and LOMR - Auburn Ravine next to Ferrari Ranch Road	JOB	0	\$80,000	\$0
28	Retrofit Lake outlet and berm***	EA	0	\$1,000,000	\$0
29	Grading	CY	0	\$4	\$0
30	Auburn Ravine Bank Stabilization	SF	0	\$1	\$0
31	Auburn Ravine Hydroseed	SF	0	\$0	\$0
32	Auburn Ravine Armoring	SF	0	\$15	\$0
33	Auburn Ravine Tree Planting	EA	0	\$100	\$0
<b>Construction Total:</b>					<b>\$90,000</b>

\* Includes traffic control and demolition of existing culverts.

**Contingency Based upon Hard Costs (15%):** \$13,500

\*\* Estimated costs, actual cost will be developed in conjunction with environmental consultant.

**Soft Costs Contingency (17%):** \$15,300

\*\*\* Further consultation will be required with geotechnical and environmental consultants to determine actual cost to retrofit lake outfall, berm and wetland permit.

**TOTAL DRAINAGE** **\$118,800**

# Engineer's Opinion of Costs

## Village 1 - Drainage

### PFE Phase 4 Summary

Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Storm Drainage System</b>					
<b>Village 1</b>					
1	12" SD Line	LF	0	\$50	\$0
2	15" SD Line	LF	0	\$60	\$0
3	18" SD Line	LF	0	\$75	\$0
4	24" SD Line	LF	0	\$85	\$0
5	30" SD Line	LF	0	\$110	\$0
6	36" SD Line	LF	0	\$125	\$0
7	42" SD Line	LF	0	\$150	\$0
8	48" SD Line	LF	0	\$180	\$0
9	60" SD Line	LF	0	\$190	\$0
10	Standard 48" SDMH (MH/400')	EA	0	\$4,250	\$0
11	Trunk 60" SDMH (MH/400')	EA	0	\$8,500	\$0
12	18" Culvert Extension	LF	0	\$125	\$0
13	24" Culvert Extension	LF	0	\$150	\$0
14	36" Culvert Extension	LF	0	\$225	\$0
15	Headwall Retrofit	EA	0	\$12,500	\$0
16	Drainage Inlet	EA	0	\$2,650	\$0
17	Drainage Inlet and Retrofit Pipe	EA	0	\$5,000	\$0
18	Grassy Swale	EA	0	\$5,000	\$0
19	Stormwater Quality Basin	EA	0	\$25,000	\$0
20	Outfall	LS	0	\$9,000	\$0
21	Culvert - 12'x5' Arch Culvert - Oak Tree near new Lake	EA	0	\$450,000	\$0
22	Culvert - 12'x5' Arch Culvert and 48" Culvert - Oak Tree near Regional Park *	EA	0	\$525,000	\$0
23	NID Box Culvert Expansion	EA	0	\$75,000	\$0
24	Culvert - 12'x5.5' Arch Culvert - North South Collector near State Route 193	EA	0	\$400,000	\$0
25	Culvert - 30" Culvert - Oak Tree Lane and South Ingram Slough East of No. So. Collector	EA	0	\$100,000	\$0
26	Wetland Mitigation - Oak Tree Lane Overcrossing **	EA	0	\$300,000	\$0
27	CLOMR and LOMR - Auburn Ravine next to Ferrari Ranch Road	JOB	0	\$80,000	\$0
28	Retrofit Lake outlet and berm***	EA	1	\$1,000,000	\$1,000,000
29	Grading	CY	0	\$4	\$0
30	Auburn Ravine Bank Stabilization	SF	0	\$1	\$0
31	Auburn Ravine Hydroseed	SF	0	\$0	\$0
32	Auburn Ravine Armoring	SF	0	\$15	\$0
33	Auburn Ravine Tree Planting	EA	0	\$100	\$0
<b>Construction Total:</b>					<b>\$1,000,000</b>

\* Includes traffic control and demolition of existing culverts.

**Contingency Based upon Hard Costs (15%):** \$150,000

\*\* Estimated costs, actual cost will be developed in conjunction with environmental consultant.

**Soft Costs Contingency (17%):** \$170,000

\*\*\* Further consultation will be required with geotechnical and environmental consultants to determine actual cost to retrofit lake outfall, berm and wetland permit.

**TOTAL DRAINAGE** **\$1,320,000**

Engineer's Opinion of Costs					
Village 1 - Drainage					
PFE Phase 4 Drainage Basin (V1D1)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Storm Drainage System</b>					
Village 1					
1	12" SD Line	LF	0	\$50	\$0
2	15" SD Line	LF	0	\$60	\$0
3	18" SD Line	LF	0	\$75	\$0
4	24" SD Line	LF	0	\$85	\$0
5	30" SD Line	LF	0	\$110	\$0
6	36" SD Line	LF	0	\$125	\$0
7	42" SD Line	LF	0	\$150	\$0
8	48" SD Line	LF	0	\$180	\$0
9	60" SD Line	LF	0	\$190	\$0
10	Standard 48" SDMH (MH/400')	EA	0	\$4,250	\$0
11	Trunk 60" SDMH (MH/400')	EA	0	\$8,500	\$0
12	18" Culvert Extension	LF	0	\$125	\$0
13	24" Culvert Extension	LF	0	\$150	\$0
14	36" Culvert Extension	LF	0	\$225	\$0
15	Headwall Retrofit	EA	0	\$12,500	\$0
16	Drainage Inlet	EA	0	\$2,650	\$0
17	Drainage Inlet and Retrofit Pipe	EA	0	\$5,000	\$0
18	Grassy Swale	EA	0	\$5,000	\$0
19	Stormwater Quality Basin	EA	0	\$25,000	\$0
20	Outfall	LS	0	\$9,000	\$0
21	Culvert - 12'x5' Arch Culvert - Oak Tree near new Lake	EA	0	\$450,000	\$0
22	Culvert - 12'x5' Arch Culvert and 48" Culvert - Oak Tree near Regional Park *	EA	0	\$525,000	\$0
23	NID Box Culvert Expansion	EA	0	\$75,000	\$0
24	Culvert - 12'x5.5' Arch Culvert - North South Collector near State Route 193	EA	0	\$400,000	\$0
25	Culvert - 30" Culvert - Oak Tree Lane and South Ingram Slough East of No. So. Collector	EA	0	\$100,000	\$0
26	Wetland Mitigation - Oak Tree Lane Overcrossing **	EA	0	\$300,000	\$0
27	CLOMR and LOMR - Auburn Ravine next to Ferrari Ranch Road	JOB	0	\$80,000	\$0
28	Retrofit Lake outlet and berm***	EA	1	\$1,000,000	\$1,000,000
29	Grading	CY	0	\$4	\$0
30	Auburn Ravine Bank Stabilization	SF	0	\$1	\$0
31	Auburn Ravine Hydroseed	SF	0	\$0	\$0
32	Auburn Ravine Armoring	SF	0	\$15	\$0
33	Auburn Ravine Tree Planting	EA	0	\$100	\$0
<b>Construction Total:</b>					<b>\$1,000,000</b>

\* Includes traffic control and demolition of existing culverts.

\*\* Estimated costs, actual cost will be developed in conjunction with environmental consultant.

\*\*\* Further consultation will be required with geotechnical and environmental consultants to determine actual cost to retrofit lake outfall, berm and wetland permit.

**Contingency Based upon Hard Costs (15/):** \$150,000

**Soft Costs Contingency (17/):** \$170,000

**TOTAL DRAINAGE** **\$1,320,000**

**APPENDIX 15**

**Lincoln Village 1 Specific Plan**

**Infrastructure Finance Plan**

**Wastewater PFE Costs**

Engineer's Opinion of Costs					
Village 1 - Sanitary Sewer					
PFE Credit Summary					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Sanitary Sewer System</b>					
Village 1					
1	10" SS Backbone Line	LF	0	\$65	\$0
2	12" SS Backbone Line	LF	0	\$75	\$0
3	15" SS Backbone Line	LF	0	\$100	\$0
4	18" SS Backbone Line	LF	0	\$120	\$0
5	24" SS Trunk Line	LF	680	\$165	\$112,200
6	12" SS Backbone Line (Required Improvement)	LF	680	-\$75	-\$51,000
7	30" SS Trunk Line	LF	2615	\$200	\$523,000
8	12" SS Backbone Line (Required Improvement)	LF	2615	-\$75	-\$196,200
9	Standard SSMH (MH/400')	EA	0	\$4,250	\$0
10	Trunk SSMH (MH/400')	EA	8	\$8,500	\$68,000
11	Standard SSMH (MH/400' - Required Improvement)	EA	8	-\$4,250	-\$34,100
12	Sanitary Sewer Lift Station	EA	0	\$300,000	\$0
13	Connection to Existing Transmission Main	EA	0	\$22,500	\$0
14	Bore and Jack (Across Auburn Ravine)	LF	0	\$900	\$0
<b>Construction Total:</b>					<b>\$421,900</b>

Contingency Based upon Hard Costs (15/): \$63,200

Soft Costs Contingency (17/): \$71,700

**TOTAL SANITARY SEWER \$556,800**

Engineer's Opinion of Costs					
Village 1 - Sanitary Sewer					
PFE Credit Phase 1 Summary					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Sanitary Sewer System</b>					
Village 1					
1	10" SS Backbone Line	LF	0	\$65	\$0
2	12" SS Backbone Line	LF	0	\$75	\$0
3	15" SS Backbone Line	LF	0	\$100	\$0
4	18" SS Backbone Line	LF	0	\$120	\$0
5	24" SS Trunk Line	LF	0	\$165	\$0
6	12" SS Backbone Line (Required Improvement)	LF	0	-\$75	\$0
7	30" SS Trunk Line	LF	2025	\$200	\$405,000
8	12" SS Backbone Line (Required Improvement)	LF	2025	-\$75	-\$151,900
9	Standard SSMH (MH/400')	EA	0	\$4,250	\$0
10	Trunk SSMH (MH/400')	EA	5	\$8,500	\$42,500
11	Standard SSMH (MH/400' - Required Improvement)	EA	5	-\$4,250	-\$21,300
12	Sanitary Sewer Lift Station	EA	0	\$300,000	\$0
13	Connection to Existing Transmission Main	EA	0	\$22,500	\$0
14	Bore and Jack (Across Auburn Ravine)	LF	0	\$900	\$0
<b>Construction Total:</b>					<b>\$274,300</b>

Contingency Based upon Hard Costs (15/): \$41,100

Soft Costs Contingency (17/): \$46,600

**TOTAL SANITARY SEWER \$362,000**

Engineer's Opinion of Costs					
Village 1 - Sanitary Sewer					
PFE Credit Phase 1 Ferrari Ranch Road 1 (V1S1)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Sanitary Sewer System</b>					
Village 1					
1	10" SS Backbone Line	LF	0	\$65	\$0
2	12" SS Backbone Line	LF	0	\$75	\$0
3	15" SS Backbone Line	LF	0	\$100	\$0
4	18" SS Backbone Line	LF	0	\$120	\$0
5	24" SS Trunk Line	LF	0	\$165	\$0
6	12" SS Backbone Line (Required Improvement)	LF	0	\$200	\$0
7	30" SS Trunk Line	LF	2025	\$200	\$405,000
8	12" SS Backbone Line (Required Improvement)	LF	2025	-\$75	-\$151,900
9	Standard SSMH (MH/400')	EA	0	\$4,250	\$0
10	Trunk SSMH (MH/400')	EA	5	\$8,500	\$42,500
11	Standard SSMH (MH/400' - Required Improvement)	EA	5	-\$4,250	-\$21,300
12	Sanitary Sewer Lift Station	EA	0	\$300,000	\$0
13	Connection to Existing Transmission Main	EA	0	\$22,500	\$0
14	Bore and Jack (Across Auburn Ravine)	LF	0	\$900	\$0
<b>Construction Total:</b>					<b>\$274,300</b>

Contingency Based upon Hard Costs (15/): \$41,100  
Soft Costs Contingency (17/): \$46,600

**TOTAL SANITARY SEWER \$362,000**



Engineer's Opinion of Costs Village 1 - Sanitary Sewer PFE Credit Phase 2 Summary					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Sanitary Sewer System</b>					
Village 1					
1	10" SS Backbone Line	LF	0	\$65	\$0
2	12" SS Backbone Line	LF	0	\$75	\$0
3	15" SS Backbone Line	LF	0	\$100	\$0
4	18" SS Backbone Line	LF	0	\$120	\$0
5	24" SS Trunk Line	LF	680	\$165	\$112,200
6	12" SS Backbone Line (Required Improvement)	LF	680	-\$75	-\$51,000
7	30" SS Trunk Line	LF	590	\$200	\$118,000
8	12" SS Backbone Line (Required Improvement)	LF	590	-\$75	-\$44,300
9	Standard SSMH (MH/400')	EA	0	\$4,250	\$0
10	Trunk SSMH (MH/400')	EA	3	\$8,500	\$25,500
11	Standard SSMH (MH/400' - Required Improvement)	EA	3	-\$4,250	-\$12,800
12	Sanitary Sewer Lift Station	EA	0	\$300,000	\$0
13	Connection to Existing Transmission Main	EA	0	\$22,500	\$0
14	Bore and Jack (Across Auburn Ravine)	LF	0	\$900	\$0
<b>Construction Total:</b>					<b>\$147,600</b>

Contingency Based upon Hard Costs (15/): \$22,100

Soft Costs Contingency (17/): \$25,100

**TOTAL SANITARY SEWER \$194,800**

Engineer's Opinion of Costs					
Village 1 - Sanitary Sewer					
PFE Credit Phase 2 Ferrari Ranch Road 2 (V1S2)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Sanitary Sewer System</b>					
Village 1					
1	10" SS Backbone Line	LF	0	\$65	\$0
2	12" SS Backbone Line	LF	0	\$75	\$0
3	15" SS Backbone Line	LF	0	\$100	\$0
4	18" SS Backbone Line	LF	0	\$120	\$0
5	24" SS Trunk Line	LF	0	\$165	\$0
6	12" SS Backbone Line (Required Improvement)	LF	0	-\$75	\$0
7	30" SS Trunk Line	LF	590	\$200	\$118,000
8	12" SS Backbone Line (Required Improvement)	LF	590	-\$75	-\$44,300
9	Standard SSMH (MH/400')	EA	0	\$4,250	\$0
10	Trunk SSMH (MH/400')	EA	1	\$8,500	\$8,500
11	Standard SSMH (MH/400' - Required Improvement)	EA	1	-\$4,250	-\$4,300
12	Sanitary Sewer Lift Station	EA	0	\$300,000	\$0
13	Connection to Existing Transmission Main	EA	0	\$22,500	\$0
14	Bore and Jack (Across Auburn Ravine)	LF	0	\$900	\$0
<b>Construction Total:</b>					<b>\$77,900</b>

Contingency Based upon Hard Costs (15%): \$11,600  
 Soft Costs Contingency (17%): \$13,300

**TOTAL SANITARY SEWER \$102,800**

Engineer's Opinion of Costs					
Village 1 - Sanitary Sewer					
PFE Credit Phase 2 Ferrari Ranch Road 3 (V1S2)					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Sanitary Sewer System</b>					
Village 1					
1	10" SS Backbone Line	LF	0	\$65	\$0
2	12" SS Backbone Line	LF	0	\$75	\$0
3	15" SS Backbone Line	LF	0	\$100	\$0
4	18" SS Backbone Line	LF	0	\$120	\$0
5	24" SS Trunk Line	LF	680	\$165	\$112,200
6	12" SS Backbone Line (Required Improvement)	LF	680	-\$75	-\$51,000
7	30" SS Trunk Line	LF	0	\$200	\$0
8	12" SS Backbone Line (Required Improvement)	LF	0	-\$75	\$0
9	Standard SSMH (MH/400')	EA	0	\$4,250	\$0
10	Trunk SSMH (MH/400')	EA	2	\$8,500	\$17,000
11	Standard SSMH (MH/400' - Required Improvement)	EA	2	-\$4,250	-\$8,500
12	Sanitary Sewer Lift Station	EA	0	\$300,000	\$0
13	Connection to Existing Transmission Main	EA	0	\$22,500	\$0
14	Bore and Jack (Across Auburn Ravine)	LF	0	\$900	\$0
<b>Construction Total:</b>					<b>\$69,700</b>

Contingency Based upon Hard Costs (15/): \$10,500  
Soft Costs Contingency (17/): \$11,800

**TOTAL SANITARY SEWER \$92,000**

Engineer's Opinion of Costs					
Village 1 - Sanitary Sewer					
PFE Summary					
Item #	Description	Unit	Quantity	Unit Price	Amount
<b>Sanitary Sewer System</b>					
Village 1					
1	10" SS Backbone Line	LF	0	\$65	\$0
2	12" SS Backbone Line	LF	0	\$75	\$0
3	15" SS Backbone Line	LF	0	\$100	\$0
4	18" SS Backbone Line	LF	0	\$120	\$0
5	24" SS Trunk Line	LF	1790	\$165	\$295,400
7	30" SS Trunk Line	LF	0	\$200	\$0
9	Standard SSMH (MH/400')	EA	0	\$4,250	\$0
10	Trunk SSMH (MH/400')	EA	4	\$8,500	\$34,000
12	Sanitary Sewer Lift Station	EA	0	\$300,000	\$0
13	Connection to Existing Transmission Main	EA	0	\$22,500	\$0
14	Bore and Jack (Across Auburn Ravine)	LF	0	\$900	\$0
<b>Construction Total:</b>					<b>\$329,400</b>

Contingency Based upon Hard Costs (15/): \$49,400

Soft Costs Contingency (17/): \$56,000

**TOTAL SANITARY SEWER \$434,800**